NEW HAMPSHIRE

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2017 ANNUAL REPORT

U.S. Department of Transportation
Federal Highway Administration

Photo source: Federal Highway Administration

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Disclaimer

Protection of Data from Discovery Admission into Evidence

23 U.S.C. 148(h)(4) states “Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for any purpose relating to this section [HSIP], shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location identified or addressed in the reports, surveys, schedules, lists, or other data.”

23 U.S.C. 409 states “Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.”

Executive Summary

The overall purpose of this program is to achieve a significant reduction in fatalities and serious injuries on all public roads through the implementation of highway safety improvement projects. The infrastructure-related projects are selected and justified by proven data-driven approaches. All highway safety improvement projects should be chosen and implemented with the goal of reducing fatalities and serious injuries on public roads and the achievement of state safety targets. Some projects will directly impact these performance measures through the implementation of engineering or behavioral countermeasures, while others may advance the data systems and analysis capabilities of the state to more accurately identify locations with the highest potential for safety improvements, evaluate the performance of highway safety improvement projects, or identify high risk roadway characteristics and driver behaviors.

In 2006, FHWA established a new approach to advancing safety by focusing on performance. In order to effectively meet performance targets, States must apply limited resources to the areas that are most likely to achieve results. The requirement to develop and regularly update SHSP ensures that this approach is maintained. NH annually tracks and reports performance measures including the number of fatalities and severe injury rates per vehicle mile traveled. Several other performance measures of specific interest to the State are listed in the NH SHSP.

New Hampshire has embraced the goals and vision of Toward zero Deaths (TZD) initiative. The State named its SHSP New Hampshire Driving Toward Zero in recognition of the National plan, and created a public outreach program with the same name to promote change in New Hampshire's safety culture (nhdtz.com). The initiative recognizes that even one traffic death is unacceptable and sets the aggressive goal to reduce all deaths on the Nation's highways, a goal virtually achieved in the aviation industry in the past several decades. Dozens of public and private stakeholders from across the State have come together in a collaborative effort to update and carry out the strategies in the SHSP. The vision of Driving Toward Zero is embodied in NH's goal of reducing the number of fatalities and serious injuries by 50% by 2030, equaling an annual reduction of 3.4%. This is measured as a five-year rolling average with the most recent data. Maine and Vermont share this target, and to that end MaineDOT and VTrans have formed a tri-state collaborative partnership with NHDOT to more effectively reach the collective regional goal. NHDOT has also incorporated the reduction of Fatalities into their Balanced Scorecard, representing one of the twelve Strategic Objectives of the agency.

The Concept of a focused approach has been further reinforced with requirements for data-driven decision making and resource allocation. 23 USC 148(c)(2), as amended by 1401(a)(1) of SAFETEA-LU, identification and Analysis of Highway Safety Problems and Opportunities, delineates specific requirements for determining safety problem identification and countermeasures analyzes. NH has been moving forward with implementation of Highway Safety Manual (HSM).

Map 21 and FAST ACT continues building on the concept of a safety data system that has the capability to identify key safety problems, establish their relative severity, and then adopt strategic and performance based goals to maximize safety. Recent improvements to the NH Data system include a phased initiative to implement electronic crash reporting through the States's crash Report Management System (CRMS), the compilation of the Model Inventory of Roadway Elements (MIRE) fundamental data elements (FDE), and the completion of the National Highway Traffic Safety Administration (NHTSA) Traffic Records Assessment. One of the key outcomes of the Traffic Records Assessment was that performance measures for data quality are needed, including measures of timeliness, accuracy, completeness, uniformity, integration and accessibility in order to guide improvements to the data and data systems.

2017 New Hampshire Highway Safety Improvement Program

The States are required to define a clear linkage between the behavioral NHTSA- funded Highway Safety Program and the HSIP through the State SHSP. The 2012 version (2nd edition) of the NH SHSP identifies 9 critical emphasis areas (CEA) to be addressed by safety safety stake holders in NH, listed below. In 2014, the Education and Public Outreach committee was created and makes the tenth (10th) emphasis area. The Committee has been meeting since July 2014 and has developed documentation that states the challenge, primary focus and goals for this emphasis area.

*Distracted Driving

*Impaired Driving

*Speeding

*Vehicle Occupant Protection

*Teen Traffic Safety

*Older Drivers

*Vulnerable Roadway Users

*Comprehensive Safety Data Improvement

*Crash Locations

*Education and Public Outreach

The 4 E's of safety (education, enforcement, engineering, and emergency medical services) should be considered in selection and development of HSIP projects, however the intent of the HSIP is primarily target engineering-related countermeasure improvements. The crash types of special interest have been identifies in the crash locations Critical Emphasis Area. The next major update to the SHSP is completed and is dated 2017 to 2021.

With respect to eligibility for funding, 23 USC 148(a)(4) provides a sample listing of eligible highway safety improvement project types. However, it is important to note that only data-driven projects that target strategies identified in the State SHSP are eligible for funding in NH. Furthermore, given the limited funding available, funds should be prioritized to help ensure that projects with the greatest safety return will be the top priority. For example, addressing crashes involving animals is a possible eligible activity but since it is not addressed in the current version of the SHSP as a CEA or related strategy, and higher safety needs have been identified, HSIP funds should not be used for that purpose in NH.

23 USC 148(e)(2) makes clear that other federal-aid funds are eligible to support and leverage the safety program. Improvements to safety features, such as guardrail, that are routinely provided as part of a broader Federal-aid project should be funded from the same source funds as the broader project when that safety feature is included in the broader project, not HSIP funds. This allows the HSIP funds to be reserved for stand-alone safety projects thereby allowing for true targeting of safety needs. This is consistent with the provision of separate funding for safety projects and with FHWA's long-standing position on the use of safety funds.

Crash data in this report reflect 2016 crash data in order to align numbers with the report that the Office of Highway Safety submits to NHTSA.

Introduction

The Highway Safety Improvement Program (HSIP) is a core Federal-aid program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads. As per 23 U.S.C. 148(h) and 23 CFR 924.15, States are required to report annually on the progress being made to advance HSIP implementation and evaluation efforts. The format of this report is consistent with the HSIP Reporting Guidance dated December 29, 2016 and consists of five sections: program structure, progress in implementing highway safety improvement projects, progress in achieving safety outcomes and performance targets, effectiveness of the improvements and compliance assessment.

Program Structure

Program Administration

Describe the general structure of the HSIP in the State.

The HSIP committee consists of Assistant Director Project Development, Design, Traffic, Maintenance, Bike Pedestrian coordinator and Planning personnel from the NHDOT, RPCs, MPOs and FHWA. Committee meetings are held monthly to review project selection and progress reports from project managers. Regional Planning Commissions are encouraged to incorporate the HSIP process in their Transportation Improvement Plan development.

Where is HSIP staff located within the State DOT?

Design

Enter additional comments here to clarify your response for this question or add supporting information.

How are HSIP funds allocated in a State?

Central Office via Statewide Competitive Application Process

Enter additional comments here to clarify your response for this question or add supporting information.

Describe how local and tribal roads are addressed as part of HSIP.

Municipally-maintained local roads and intersections are included in the screening with State-maintained sites and are evaluated using the same methodology. The majority of rural collector as well as rural and urban local road (functional class 8, 9, and 19) traffic data are not available, and therefore the volumes are estimated based on similar roads that have measured data. Urban and rural local roads are categorized separately from the other

functional classes in network screening to account for the estimation of volume data. The State is working to improve volume data on all public roads.

Identify which internal partners (e.g., State departments of transportation (DOTs) Bureaus, Divisions) are involved with HSIP planning.

Traffic Engineering/Safety
Design
Planning
Maintenance
Operations
Districts/Regions
Local Aid Programs Office/Division
Other-Regional Planning Commission staff

Enter additional comments here to clarify your response for this question or add supporting information.

Describe coordination with internal partners.

The State's HSIP is centrally administered. Annually, the Bureau of Highway Design performs a statewide network screening of crashes on all roadway types and distributes results to NHDOT Districts, Bureau of Planning and Community Assistance, and Bureau of Traffic, as well as Metropolitan Planning Organizations (MPO) and Regional Planning Commissions (RPC). These stakeholders are encouraged to review the results of the analysis and provide comments on known aspects of specific locations. Comments may include, but is not limited to: recent work in the area, significant changes to traffic patterns or volumes, upcoming capital projects in the area, local experience/insight on crashes, etc.

The HSIP committee consists of Assistant Director Project Development, Design, Traffic, Maintenance, Bike Pedestrian coordinator and Planning personnel from the NHDOT, RPCs, MPOs and FHWA . Committee meetings are held monthly to review project selection and progress reports from project managers. Regional Planning Commissions are encouraged to incorporate the HSIP process in their Transportation Improvement Plan development.

HSIP Committee and other stakeholders will receive a list of sites identified through network screening for review. Some sites may go beyond the scope of an HSIP project, which typically means their cost is greater than the anticipated benefits, or the overall cost of right-of-way, environmental, and scope of improvements is of a magnitude that it is of an improvement is deemed too costly or prohibitive in relation to other potential HSIP projects. These sites are recommended for consideration in the long-range capital improvement plans

Identify which external partners are involved with HSIP planning.

Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
Local Government Agency
FHWA
Other-Regional Planning Commission Staff

Enter additional comments here to clarify your response for this question or add supporting information.

Describe coordination with external partners.

The HSIP committee meets monthly with internal and external partners receiving the same coordination. Email is distributed to all committee members. Some of the emails include meeting notification, agendas, meeting minutes, any documents for projects that will be reviewed at the meeting and the monthly project lists.

Have any program administration practices used to implement the HSIP changed since the last reporting period?

No

Are there any other aspects of HSIP Administration on which the State would like to elaborate?

Yes

Describe other aspects of HSIP Administration on which the State would like to elaborate.

The FAST Act removed the use of HSIP funds for noninfrastructure projects. This removed the marketing contract NHDOT had to for public outreach and media campaigns. For education and public outreach in the future, we will work with the Office of Highway Safety to use NHTSA funds for any media campaigns.

Program Methodology

Does the State have an HSIP manual or similar that clearly describes HSIP planning, implementation and evaluation processes?

Yes

To upload a copy of the State processes, attach files below.

File Name:
New Hampshire HSIP Guidance2013.doc

Select the programs that are administered under the HSIP.

Median Barrier
Intersection
Horizontal Curve
Bicycle Safety
Rural State Highways
Roadway Departure
Low-Cost Spot Improvements
Sign Replacement And Improvement
Local Safety
Pedestrian Safety
Right Angle Crash
Left Turn Crash
Shoulder Improvement
Segments
HRRR

Enter additional comments here to clarify your response for this question or add supporting information.

Program:	Bicycle Safety
Date of Program Methodology:	10/1/2013

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
All crashes Other-EPDO	Traffic Volume	Other-Site Subtype

What project identification methodology was used for this program? [Check all that apply]

Expected crash frequency with EB adjustment

2017 New Hampshire Highway Safety Improvement Program
Equivalent property damage only (EPDO Crash frequency)

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Yes

Describe the methodology used to identify local road projects as part of this program.

How are projects under this program advanced for implementation?

Competitive application process
selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

Ranking based on B/C : 50
Available funding : 50

Enter additional comments here to clarify your response for this question or add supporting information.

Program: Horizontal Curve

Date of Program Methodology: 10/1/2013

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes	**Exposure**	**Roadway**

All crashes	Traffic	Functional classification
Other-Run Off the Road	Volume	Other-Site Subtype

What project identification methodology was used for this program? [Check all that apply]

Expected crash frequency with EB adjustment

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Yes

Describe the methodology used to identify local road projects as part of this program.

How are projects under this program advanced for implementation?

Competitive application process
selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

Ranking based on B/C : 50
Available funding : 50

Enter additional comments here to clarify your response for this question or add supporting information.

Program: HRRR

Date of Program Methodology: 10/1/2013

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area
FHWA focused approach to safety

What is the funding approach for this program? [Check one]

2017 New Hampshire Highway Safety Improvement Program
Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
Fatal and serious injury crashes only Other-Run Off the Road	Traffic Volume	Other-site subtype

What project identification methodology was used for this program? [Check all that apply]

Expected crash frequency with EB adjustment

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Yes

Describe the methodology used to identify local road projects as part of this program.

How are projects under this program advanced for implementation?

Competitive application process
selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

Ranking based on B/C : 50
Available funding : 50

Enter additional comments here to clarify your response for this question or add supporting information.

Program: Intersection

Date of Program Methodology: 10/1/2013

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What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
All crashes	Traffic Volume	Functional classification
Other-Run Off the Road		Other-Site Subtype

What project identification methodology was used for this program? [Check all that apply]

Expected crash frequency with EB adjustment

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Yes

Describe the methodology used to identify local road projects as part of this program.

How are projects under this program advanced for implementation?

Competitive application process
selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

Ranking based on B/C : 50
Available funding : 50

Enter additional comments here to clarify your response for this question or add supporting information.

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Program: Left Turn Crash

Date of Program Methodology: 10/1/2013

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
Fatal and serious injury crashes only Other-Run Off the Road	Traffic Volume	Other-site subtype

What project identification methodology was used for this program? [Check all that apply]

Expected crash frequency with EB adjustment

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Yes

Describe the methodology used to identify local road projects as part of this program.

How are projects under this program advanced for implementation?

Competitive application process
selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

2017 New Hampshire Highway Safety Improvement Program
Ranking based on B/C : 50
Available funding : 50

Enter additional comments here to clarify your response for this question or add supporting information.

Program: Local Safety

Date of Program Methodology: 10/1/2013

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
All crashes	Traffic Volume	Functional classification

What project identification methodology was used for this program? [Check all that apply]

Crash frequency
Other-RSA local agency

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Yes

Describe the methodology used to identify local road projects as part of this program.

How are projects under this program advanced for implementation?

Competitive application process
selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

Ranking based on B/C : 50
Available funding : 50

Enter additional comments here to clarify your response for this question or add supporting information.

Program: Low-Cost Spot Improvements

Date of Program Methodology: 10/1/2013

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
Fatal and serious injury crashes only Other-Run Off the Road	Traffic Volume	Other-site subtype

What project identification methodology was used for this program? [Check all that apply]

Expected crash frequency with EB adjustment
Other-RSA request from local agencies

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Yes

Describe the methodology used to identify local road projects as part of this program.

How are projects under this program advanced for implementation?

Competitive application process
selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

Ranking based on B/C : 50
Available funding : 50

Enter additional comments here to clarify your response for this question or add supporting information.

Program: Median Barrier

Date of Program Methodology: 10/1/2013

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
All crashes Other-Run Off the Road	Traffic Volume	Functional classification

What project identification methodology was used for this program? [Check all that apply]

Expected crash frequency with EB adjustment

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

No

Describe the methodology used to identify local road projects as part of this program.
no medians on local roads

How are projects under this program advanced for implementation?

Competitive application process
selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

Ranking based on B/C : 50
Available funding : 50

Enter additional comments here to clarify your response for this question or add supporting information.

Program: Pedestrian Safety

Date of Program Methodology: 10/1/2013

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area
FHWA focused approach to safety

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
Fatal crashes only		
Fatal and serious injury crashes only		

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What project identification methodology was used for this program? [Check all that apply]

Crash frequency
Expected crash frequency with EB adjustment
Equivalent property damage only (EPDO Crash frequency)
Excess expected crash frequency using method of moments

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Yes

Describe the methodology used to identify local road projects as part of this program.
no medians on local roads

How are projects under this program advanced for implementation?

Competitive application process
selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Ranking based on B/C : 50
Available funding : 50

Enter additional comments here to clarify your response for this question or add supporting information.

Program: Right Angle Crash

Date of Program Methodology: 10/1/2013

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
Fatal and serious injury crashes only Other-Run Off the Road	Traffic Volume	Other-site subtype

What project identification methodology was used for this program? [Check all that apply]

Expected crash frequency with EB adjustment

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Yes

Describe the methodology used to identify local road projects as part of this program.
no medians on local roads

How are projects under this program advanced for implementation?

Competitive application process
selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

Ranking based on B/C : 50
Available funding : 50

Enter additional comments here to clarify your response for this question or add supporting information.

Program: Roadway Departure

Date of Program Methodology: 10/1/2013

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

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What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
All crashes Other-EPDO	Traffic Volume	Other-Site Subtype

What project identification methodology was used for this program? [Check all that apply]

Expected crash frequency with EB adjustment
Equivalent property damage only (EPDO Crash frequency)

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

No

Describe the methodology used to identify local road projects as part of this program.
EPDO

How are projects under this program advanced for implementation?

Competitive application process
selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

Ranking based on B/C : 50
Available funding : 50

Enter additional comments here to clarify your response for this question or add supporting information.

Program: Rural State Highways

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Date of Program Methodology: 10/1/2013

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
All crashes	Traffic	Horizontal curvature
Fatal and serious injury crashes only	Volume	Roadside features

What project identification methodology was used for this program? [Check all that apply]

Crash frequency
Expected crash frequency with EB adjustment

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Yes

Describe the methodology used to identify local road projects as part of this program.
EPDO

How are projects under this program advanced for implementation?

Competitive application process
selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

Ranking based on B/C : 50
Available funding : 50

Enter additional comments here to clarify your response for this question or add supporting information.

Program: Segments

Date of Program Methodology: 10/1/2013

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
Fatal and serious injury crashes only	Traffic	Median width
Other-Run off the Road	Volume	Other-Site subtype

What project identification methodology was used for this program? [Check all that apply]

Expected crash frequency with EB adjustment

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Yes

Describe the methodology used to identify local road projects as part of this program.
EPDO

How are projects under this program advanced for implementation?

Competitive application process
selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical

rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

Ranking based on B/C : 50
Available funding : 50

Enter additional comments here to clarify your response for this question or add supporting information.

Program: Shoulder Improvement

Date of Program Methodology: 10/1/2013

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
All crashes Fatal and serious injury crashes only	Traffic Volume	Roadside features

What project identification methodology was used for this program? [Check all that apply]

Expected crash frequency with EB adjustment
Equivalent property damage only (EPDO Crash frequency)

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Yes

Describe the methodology used to identify local road projects as part of this program.
EPDO

2017 New Hampshire Highway Safety Improvement Program

How are projects under this program advanced for implementation?

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Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

Ranking based on B/C : 50
Available funding : 50

Enter additional comments here to clarify your response for this question or add supporting information.

Program: Sign Replacement And Improvement

Date of Program Methodology: 10/1/2013

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Funding set-aside

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
Fatal and serious injury crashes only Other-Run Off the Road	Traffic Volume	Other-site subtype

What project identification methodology was used for this program? [Check all that apply]

Expected crash frequency with EB adjustment
Other-Run off the Road

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Yes

Describe the methodology used to identify local road projects as part of this program.
EPDO

How are projects under this program advanced for implementation?

Competitive application process
selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

Ranking based on B/C : 50
Available funding : 50

Enter additional comments here to clarify your response for this question or add supporting information.

What percentage of HSIP funds address systemic improvements?

50

HSIP funds are used to address which of the following systemic improvements? Please check all that apply.

Rumble Strips
Install/Improve Signing
Install/Improve Pavement Marking and/or Delineation
Upgrade Guard Rails
Add/Upgrade/Modify/Remove Traffic Signal
Horizontal curve signs
Other-intersections
Other-F--terminal Replacements
Other-Other Median Barriers

Enter additional comments here to clarify your response for this question or add supporting information.

What process is used to identify potential countermeasures? [Check all that apply]

Engineering Study

Rumble Strips
Crash data analysis
SHSP/Local road safety plan
Install/Improve Signing
Stakeholder input
Upgrade Guard Rails
Add/Upgrade/Modify/Remove Traffic Signal
Horizontal curve signs
Other-intersections
Other-F--terminal Replacements
Other-Other Median Barriers

Enter additional comments here to clarify your response for this question or add supporting information.

Does the State HSIP consider connected vehicles and ITS technologies?

No

Enter additional comments here to clarify your response for this question or add supporting information.
NHDOT has not started implementing connected vehicles and ITS technologies. This will need to be addressed in the future years. There is State legislation being reviewed by the House Transportation committee that defines connected vehicles but there are no changes or requirements yet for the Department of Transportation or Department of Safety.

Does the State use the Highway Safety Manual to support HSIP efforts?

Yes

Please describe how the State uses the HSM to support HSIP efforts.

The NHDOT uses the Highway Safety manual for Road safety audits. The benefit to cost ratio (B/C ratio) calculations for the NHDOT program require the value to be greater than one to be an eligable safety improvement using HSIP funds. The value for the crash modification factor used in the b/c ratio calculation is selected from the tables in the Highway Safety Manual.

Have any program methodology practices used to implement the HSIP changed since the last reporting period?

No

Are there any other aspects of the HSIP methodology on which the State would like to elaborate?

Yes

Describe other aspects of the HSIP methodology on which the State would like to elaborate.

The Road Safety Audit program changed its application criteria and when the applications can be accepted. The application deadline is submitted every December 1st. The Road safety audit criteria includes:

* at least one crash resulting in a fatal or serious injury in the past 10 years
* no project completed in the last 5 years addressing safety concerns
* no previous studies indicating desired countermeasures that are too expensive
* completed application forms with signatures, location description, description of the safety concerns and traffic volumes
* selecting sites that are crash data driven

Once the applications are received the applications are reviewed for completeness, safety issues and crash data. The information about each location is entered into a spreadsheet and is ranked for the highest safety improvement to reduce fatalities and serious injuries on NH Roadways.

This change has allowed NHDOT to plan funding for the year and to ensure the projected selected for the Highway Safety Improvement Program has crash data to support the decision to include the project in the program.

Project Implementation

Funds Programmed

Reporting period for HSIP funding.

Federal Fiscal Year

Enter additional comments here to clarify your response for this question or add supporting information.

Enter the programmed and obligated funding for each applicable funding category.

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED
HSIP (23 U.S.C. 148)	$9,365,500	$9,340,114	99.73%
HRRR Special Rule (23 U.S.C. 148(g)(1))	$164,790	$164,790	100%
Penalty Funds (23 U.S.C. 154)	$0	$0	0%
Penalty Funds (23 U.S.C. 164)	$0	$0	0%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	$1,150,000	$1,150,000	100%
Other Federal-aid Funds (i.e. STBG, NHPP)	$0	$0	0%
State and Local Funds	$0	$0	0%
Totals	$10,680,290	$10,654,904	99.76%

Enter additional comments here to clarify your response for this question or add supporting information.

The HRRR funds were left over from previous years and will be spent this year. The HRRR funds are not new funds for this year and were from a de-obligated project that advertised for construction several years ago.

How much funding is programmed to local (non-state owned and operated) or tribal safety projects?

2%

How much funding is obligated to local or tribal safety projects?

2%

Enter additional comments here to clarify your response for this question or add supporting information.

How much funding is programmed to non-infrastructure safety projects?

$459,800

How much funding is obligated to non-infrastructure safety projects?

$459,800

Enter additional comments here to clarify your response for this question or add supporting information.

This dollar amount has decreased from last year due to the changes with the FAST ACT requirements of non-infrastructure projects. We currently are using these funds for Road Safety Audits, software, evaluation of rumble strips, and updating manuals for the HISP program.

How much funding was transferred in to the HSIP from other core program areas during the reporting period under 23 U.S.C. 126?

0%

How much funding was transferred out of the HSIP to other core program areas during the reporting period under 23 U.S.C. 126?

0%

Enter additional comments here to clarify your response for this question or add supporting information.

NHDOT does not transfer funds into or out of the Highway Safety Improvement program.

Discuss impediments to obligating HSIP funds and plans to overcome this challenge in the future.

The NHDOT mostly relies on the use of Federal Highway Trust Fund (HTF). The impact to The State of New Hampshire and the Transportation Improvement program will result in general uncertainty and will have a significant impact to funding the State Ten Year Transportation Improvement Plan. Due to limited State Highway Trust Fund revenues, the State of New Hampshire uses Turnpike Toll Credits to meet the match of the federal program. As a result, there are limited State dollars to support the federal program and as a consequence, the STIP becomes dependent on the availability of federal funds. Any loss of federal funds could very well lead to suspension of work and delay of future State and local transportation projects.

The Fixing America's Surface Transportation Act (FAST Act) signed in December 2015 provides funding for the Highway Safety Improvement program. The FAST Act continues the Highway Safety Improvement Program (HSIP) to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-state-owned public roads and roads on tribal lands. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance.

Does the State want to elaborate on any other aspects of it's progress in implementing HSIP projects?

Yes

Describe any other aspects of the State's progress in implementing HSIP projects on which the State would like to elaborate.

The Road Safety audit ranking spreadsheet provides a data driven analysis of the requested locations. The locations with crash data, traffic volumes and speed limits are ranked against each other. The spreadsheet shows locations with higher points are better applications/locations for safety improvements. The Road Safety Audit program also has a yearly application dealine which allows the program to have a schedule.

General Listing of Projects

List the projects obligated using HSIP funds for the reporting period.

													RELATIONSHIP TO SHSP	
PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	EMPHASIS AREA	STRATEGY
Statewide	Roadway signs and traffic control	Roadway signs (including post) - new or updated			$20048	$20048	HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		State Highway Agency	Systemic	Roadway Departure	reducing lane departure crashes
Keene	Intersection traffic control	Modify control - modifications to roundabout	1	Intersections	$195388.82	$195388.82	HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	14,338	45	State Highway Agency	Spot	Intersections	reducing lane departure crashes
District Three	Roadside	Barrier - cable			$164790	$998739.24	HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Roadway Departure	reducing lane departure crashes
Brookline	Intersection traffic control	Intersection traffic control - other			$278777.84	$278777.84	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	5,700	45	State Highway Agency	Spot	Intersections	reducing lane departure crashes
Henniker	Intersection geometry	Intersection geometrics - re-assign existing lane use			$347	$347	HSIP (23 U.S.C. 148)	Rural Minor Arterial	5,000	30	State Highway Agency	Spot	Intersections	reducing lane departure crashes
Statewide # 40604	Roadside	Barrier end treatments (crash cushions, terminals)			$1017224.45	$1017224.45	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Roadway Departure	reducing lane departure crashes
Farmington	Roadway	Roadway widening - add lane(s) along segment			$1765951.43	$1765951.43	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	11,000	45	State Highway Agency	Spot	Lane Departure	reducing lane departure crashes
Statewide #40922	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders			$451169.40	$451169.40	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Intersections	reducing lane departure crashes
Statewide #40922	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders			$451169.40	$451169.40	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Intersections	reducing lane departure crashes
Statewide #40922	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders			$451169.40	$451169.40	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Intersections	reducing lane departure crashes
Peterborough	Intersection traffic control	Intersection flashers - add "when flashing" warning sign-mounted			$354200	$354200	HSIP (23 U.S.C. 148)	Rural Minor Arterial	1,300	45	State Highway Agency	Spot	Intersections	reducing lane departure crashes
Ossipee # 29315	Intersection traffic control	Modify control - modifications to roundabout			$33000	$506000	HSIP (23 U.S.C. 148)	Rural Minor Arterial	4,998	45	State Highway Agency	Spot	Intersections	reducing lane departure crashes
Claremont #25621	Intersection traffic control	Modify traffic signal - miscellaneous/other/unspecified			$33000	$407000	HSIP (23 U.S.C. 148)	Rural Major Collector	20,000	35	State Highway Agency	Spot	Intersections	reducing lane departure crashes
Tilton #29358	Access management	Change in access - close or restrict existing access			$71500	$99000	HSIP (23 U.S.C. 148)	Rural Major Collector	18,210	50	State Highway Agency	Spot	Intersections	reducing lane departure crashes

													RELATIONSHIP TO SHSP	
PROJECT NAME	**IMPROVEMENT CATEGORY**	**SUBCATEGORY**	**OUTPUTS**	**OUTPUT TYPE**	**HSIP PROJECT COST($)**	**TOTAL PROJECT COST($)**	**FUNDING CATEGORY**	**FUNCTIONAL CLASSIFICATION**	**AADT**	**SPEED**	**OWNERSHIP**	**METHOD FOR SITE SELECTION**	**EMPHASIS AREA**	**STRATEGY**
Statewide #41338	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders			$115500	$995170	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Intersections	reducing lane departure crashes
Pelham #29338	Intersection traffic control	Intersection flashers - add "when flashing" warning sign-mounted			$121000	$121000	HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	11,000	45	State Highway Agency	Spot	Intersections	reducing lane departure crashes
Lancaster-Gorham #41204	Roadside	Barrier - other			$1200000	$1200000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Roadway Departure	reducing lane departure crashes
Canterbury-Northfield	Roadway	Pavement surface - miscellaneous			$1500000	$1500000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Interstate	14,441	65	State Highway Agency	Systemic	Roadway Departure	reducing lane departure crashes
Statewide #40803	Roadside	Barrier - cable			$165000	$1650000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other Freeways and Expressways	0	50	State Highway Agency	Systemic	Roadway Departure	reducing lane departure crashes
Statewide #41269	Roadside	Barrier end treatments (crash cushions, terminals)			$165000	$1268300	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Roadway Departure	reducing lane departure crashes
Derry #24861	Intersection geometry	Auxiliary lanes - add left-turn lane			$181500	$1501500	HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	5,600	45	State Highway Agency	Spot	Intersections	reducing lane departure crashes
Swanzey #40485	Intersection traffic control	Modify control - modifications to roundabout			$27500	$1001000	HSIP (23 U.S.C. 148)	Rural Minor Arterial	4,500	30	State Highway Agency	Spot	Intersections	reducing lane departure crashes
Statewide #41284	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists			$31900	$31900	HSIP (23 U.S.C. 148)	Bicycle and Pedestrian Implementation Guide	0		documentation	Systemic	Pedestrians	reducing lane departure crashes
Statewide #41418	Roadway	Roadway - other			$16500	$16500	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Roadway Departure	reducing lane departure crashes
Statewide #40921	Interchange design	Interchange design - other	3	Intersections	$11000	$11000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Spot	Intersections	reducing lane departure crashes
Statewide #41280	Non-infrastructure	Data/traffic records			$20900	$20900	HSIP (23 U.S.C. 148)	Update of HSIP manual	0		documentation	Systemic	Data	reducing lane departure crashes
Statewide #40913	Non-infrastructure	Data/traffic records			$110000	$110000	HSIP (23 U.S.C. 148)	software	0		software	Systemic	Data	reducing lane departure crashes
Statewide #41283	Non-infrastructure	Road safety audits	3	Intersections	$93500	$93500	HSIP (23 U.S.C. 148)	Report and Concept plans	0		State Highway Agency	Spot	Intersections	reducing lane departure crashes
Statewide #28534	Roadway	Rumble strips - edge or shoulder			$66000	$66000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Roadway Departure	reducing lane departure crashes

2017 New Hampshire Highway Safety Improvement Program

													RELATIONSHIP TO SHSP	
PROJECT NAME	**IMPROVEMENT CATEGORY**	**SUBCATEGORY**	**OUTPUTS**	**OUTPUT TYPE**	**HSIP PROJECT COST($)**	**TOTAL PROJECT COST($)**	**FUNDING CATEGORY**	**FUNCTIONAL CLASSIFICATION**	**AADT**	**SPEED**	**OWNERSHIP**	**METHOD FOR SITE SELECTION**	**EMPHASIS AREA**	**STRATEGY**
Statewide #28534	Roadway	Rumble strips - edge or shoulder			$66000	$66000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Roadway Departure	reducing lane departure crashes
Statewide #28534	Roadway	Rumble strips - edge or shoulder			$66000	$66000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Roadway Departure	reducing lane departure crashes
Statewide #40915	Roadway signs and traffic control	Sign sheeting - upgrade or replacement			$82500	$82500	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Interstate	0	65	State Highway Agency	Systemic	Data	reducing lane departure crashes
Swanzey # 15697	Intersection traffic control	Modify control - modifications to roundabout			$3000	$1774450	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0	45	State Highway Agency	Spot	Intersections	reducing lane departure crashes
Rochester # 22712	Roadway signs and traffic control	Sign sheeting - upgrade or replacement			$100000	$731002	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0	45	Town or Township Highway Agency	Spot	Roadway Departure	reducing lane departure crashes

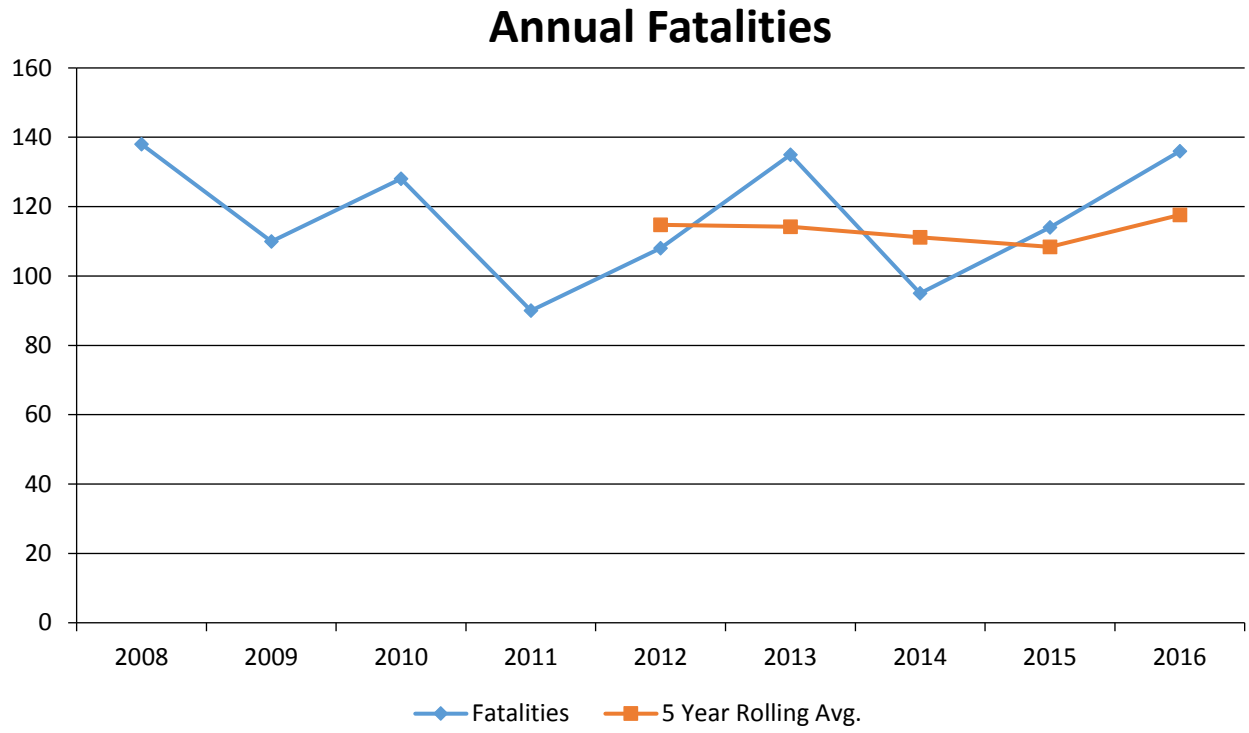
Enter additional comments here to clarify your response for this question or add supporting information.

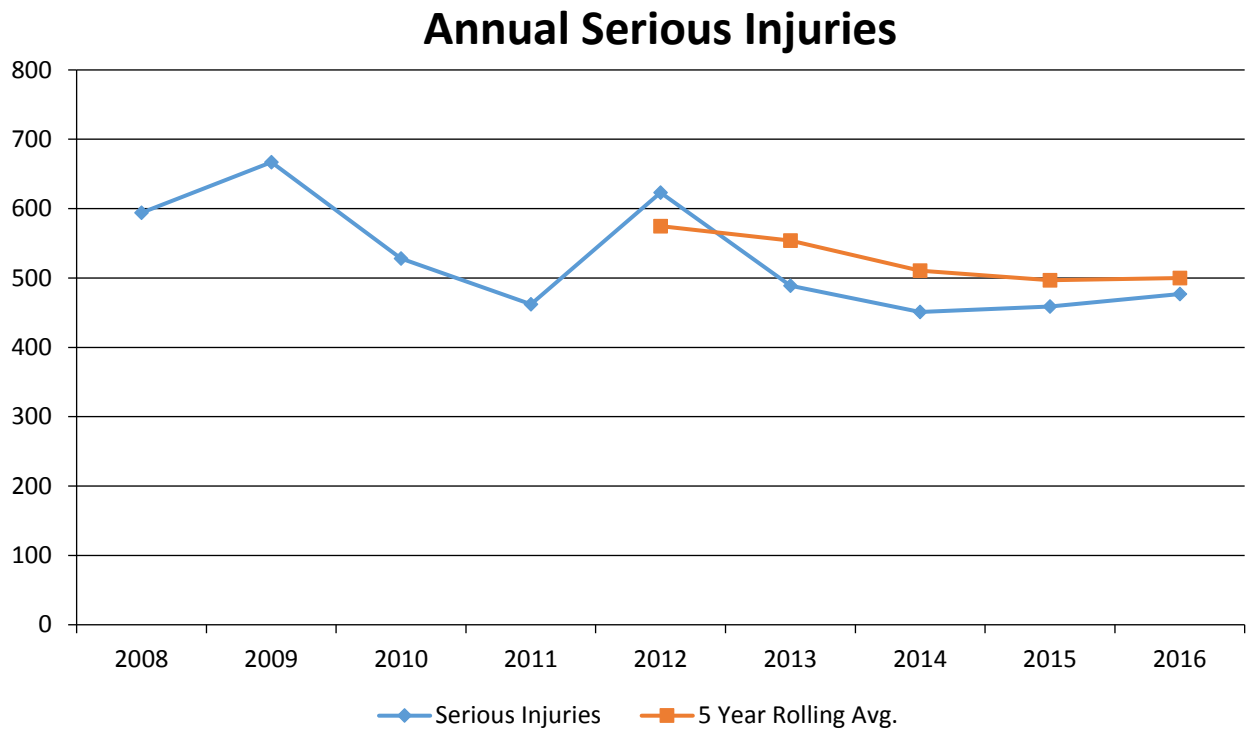
Safety Performance

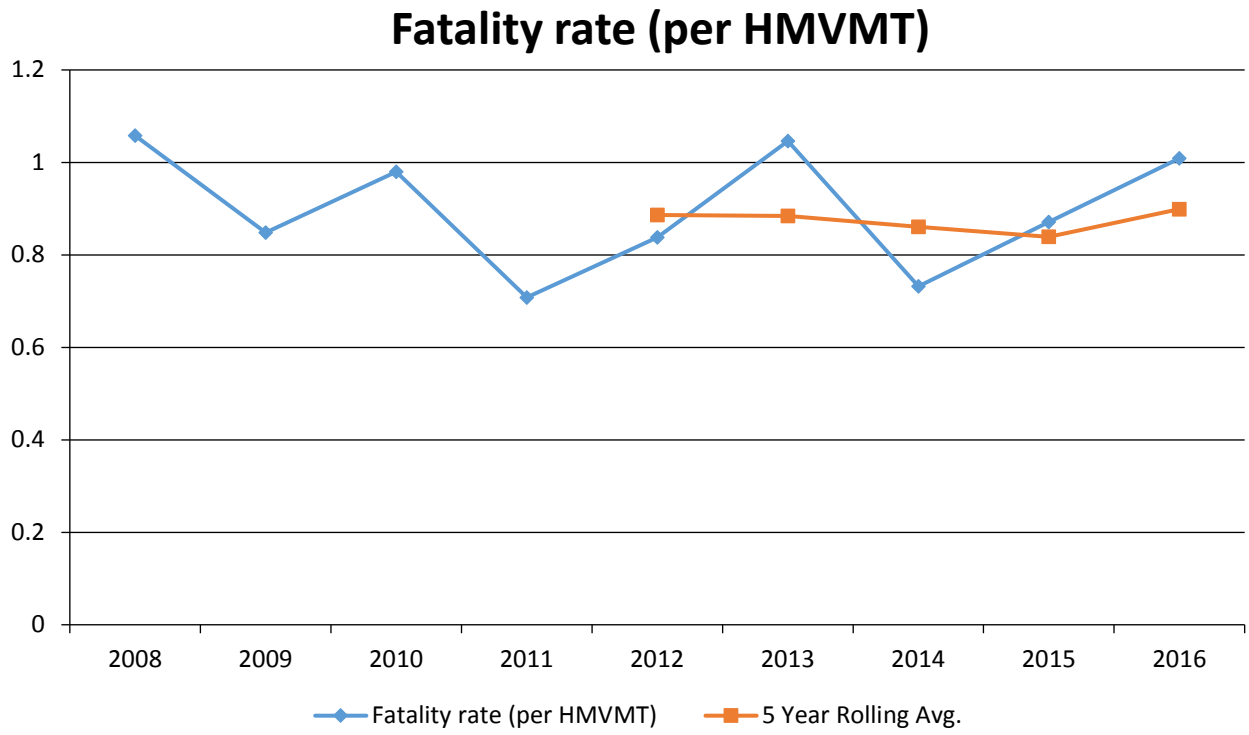
General Highway Safety Trends

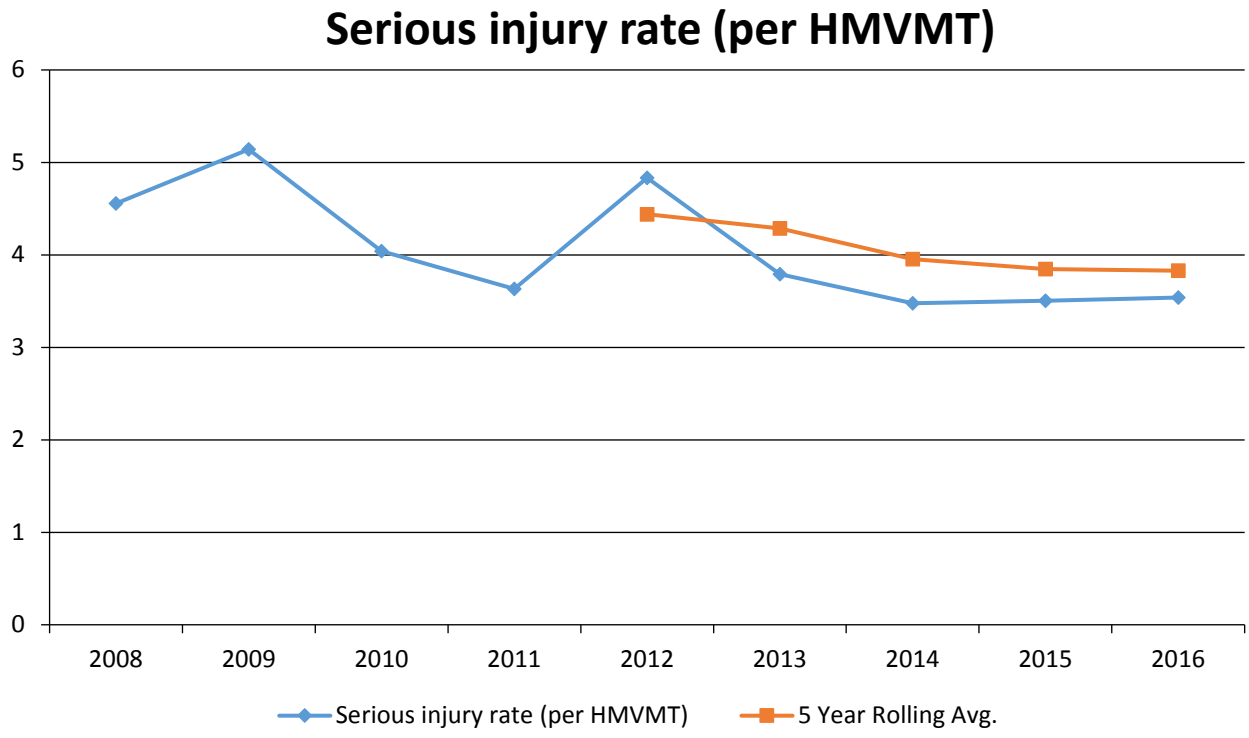
Present data showing the general highway safety trends in the State for the past five years.

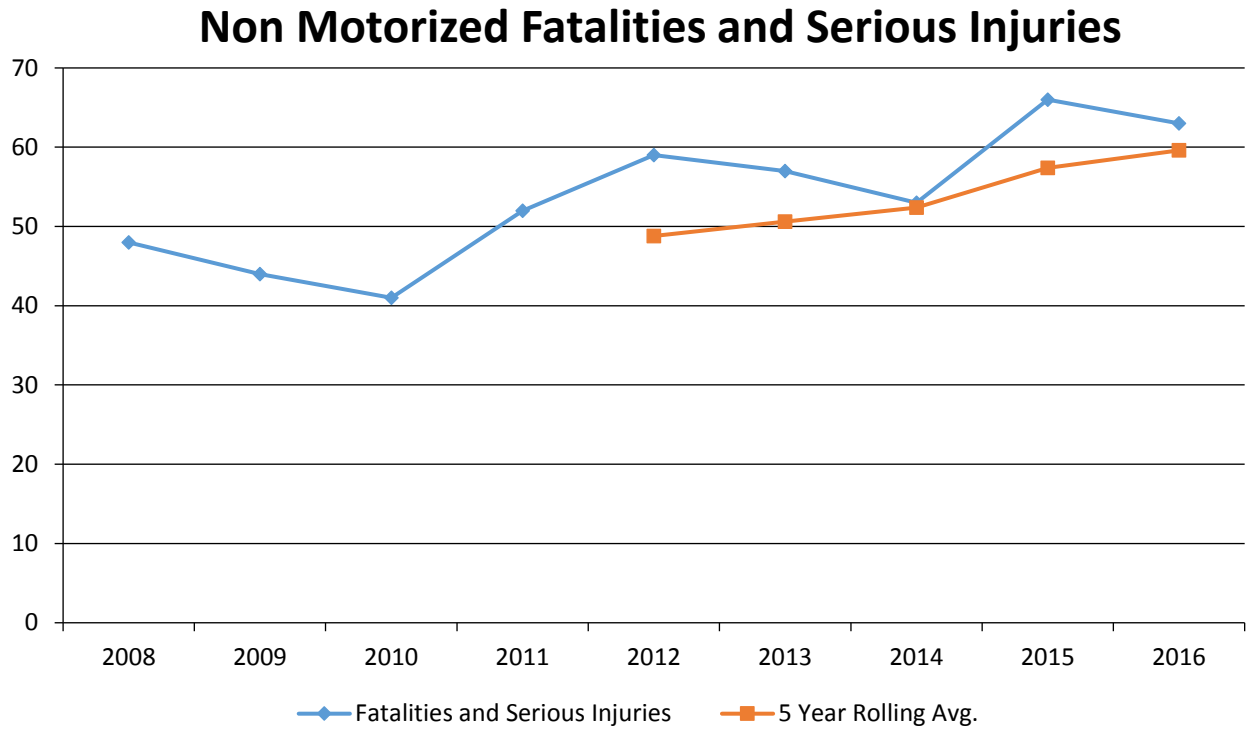
PERFORMANCE MEASURES	2008	2009	2010	2011	2012	2013	2014	2015	2016
Fatalities	138	110	128	90	108	135	95	114	136
Serious Injuries	594	667	528	462	623	489	451	459	477
Fatality rate (per HMVMT)	1.058	0.848	0.980	0.708	0.838	1.046	0.732	0.871	1.009
Serious injury rate (per HMVMT)	4.555	5.141	4.041	3.632	4.832	3.790	3.477	3.505	3.540
Number non-motorized fatalities	9	9	9	9	9	17	16	13	21
Number of non-motorized serious injuries	39	35	32	43	50	40	37	53	42


Annual Fatalities
160
140
120
100
80
60
40
20
0
2008
2009
2010
2011
2012
2013
2014
2015
2016
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
800
700
600
500
400
300
200
100
0
2008
2009
2010
2011
2012
2013
2014
2015
2016
Serious Injuries
5 Year Rolling Avg.


Fatality rate (per HMVMT)
1.2
1
0.8
0.6
0.4
0.2
0
2008
2009
2010
2011
2012
2013
2014
2015
2016
Fatality rate (per HMVMT)
5 Year Rolling Avg.


Serious injury rate (per HMVMT)
6
5
4
3
2
1
0
2008
2009
2010
2011
2012
2013
2014
2015
2016
Serious injury rate (per HMVMT)
5 Year Rolling Avg.



Enter additional comments here to clarify your response for this question or add supporting information.

For 2008, 2009 & 2010 the annual serious injury number are numbers NHDOT used in previous reports and do not match numbers the Office of Highway Safety reported back in 2008 because in those three years Office of Highway Safety was reporting all injury numbers not the serious injury number. Serious injury numbers do match the Office of Highway Safety for years 2011-2016 as in their report the 2008, 2009 and 2010 numbers are not listed.

Data sources are prescribed by the regulations:

- Fatalities: NHTSA
- Rate of Fatalities (10^8 VMT): NHTSA & HPMS
- Serious Injuries: DOS
- Rate of Serious Injuries (10^8 VMT): DOS & HPMS
- Non Motorized Fatalities & Serious Injuries: NHTSA & DOS

NHTSA - Fatality data is posted by NHTSA. The source is considered consistent and reliable. Data is available from 2007 allowing for the use of 5-yr averages for trend analysis.

HPMS - Traffic volume data is calculated by DOT posted by FHWA. The source is considered consistent and reliable. Data is available from 2007 allowing for the use of 5-yr averages for trend analysis.

DOS - Serious injury data is provided by DOS. Previously reported values have been inconsistent and duplicated records have been found in the data. Data is not available from 2007, therefore 5-yr average values may not be used for trend analysis and more variable yearly values must be

Describe fatality data source.

FARS

Enter additional comments here to clarify your response for this question or add supporting information.

NHTSA - Fatality data is posted by NHTSA. The source is considered consistent and reliable. Data is available from 2007 allowing for the use of 5-yr averages for trend analysis.

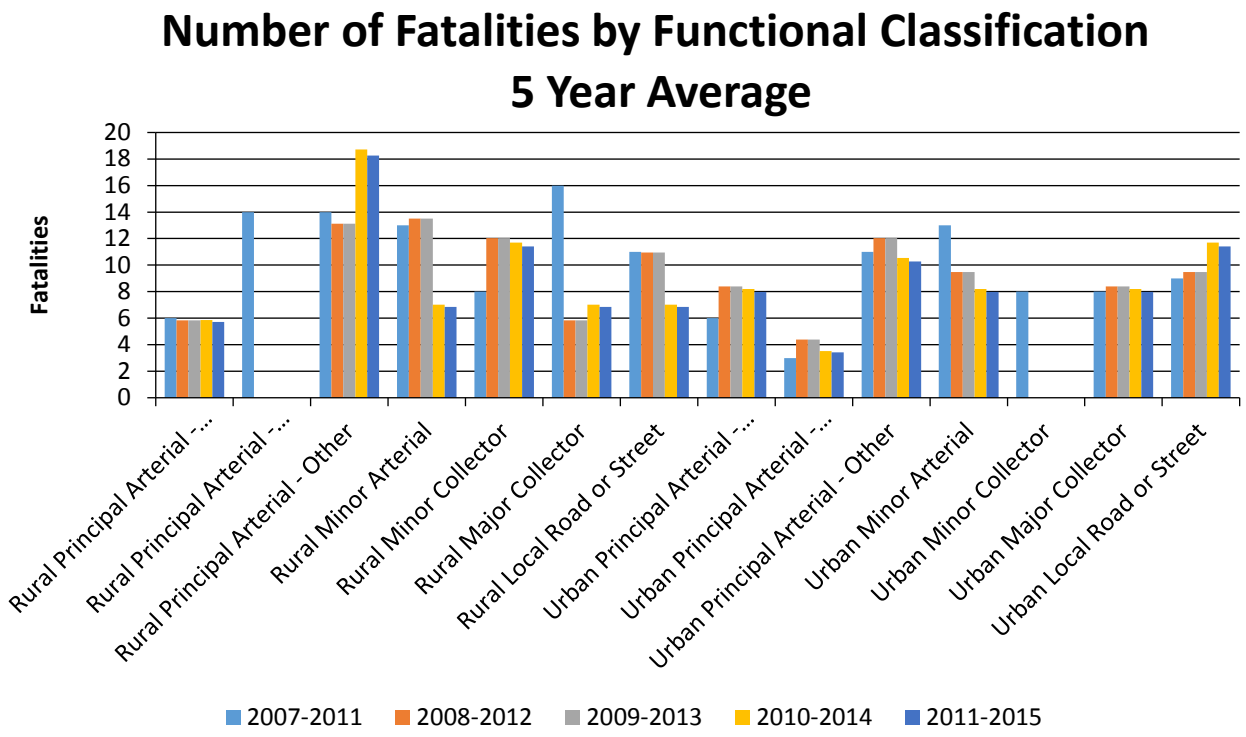
To the maximum extent possible, present this data by functional classification and ownership.

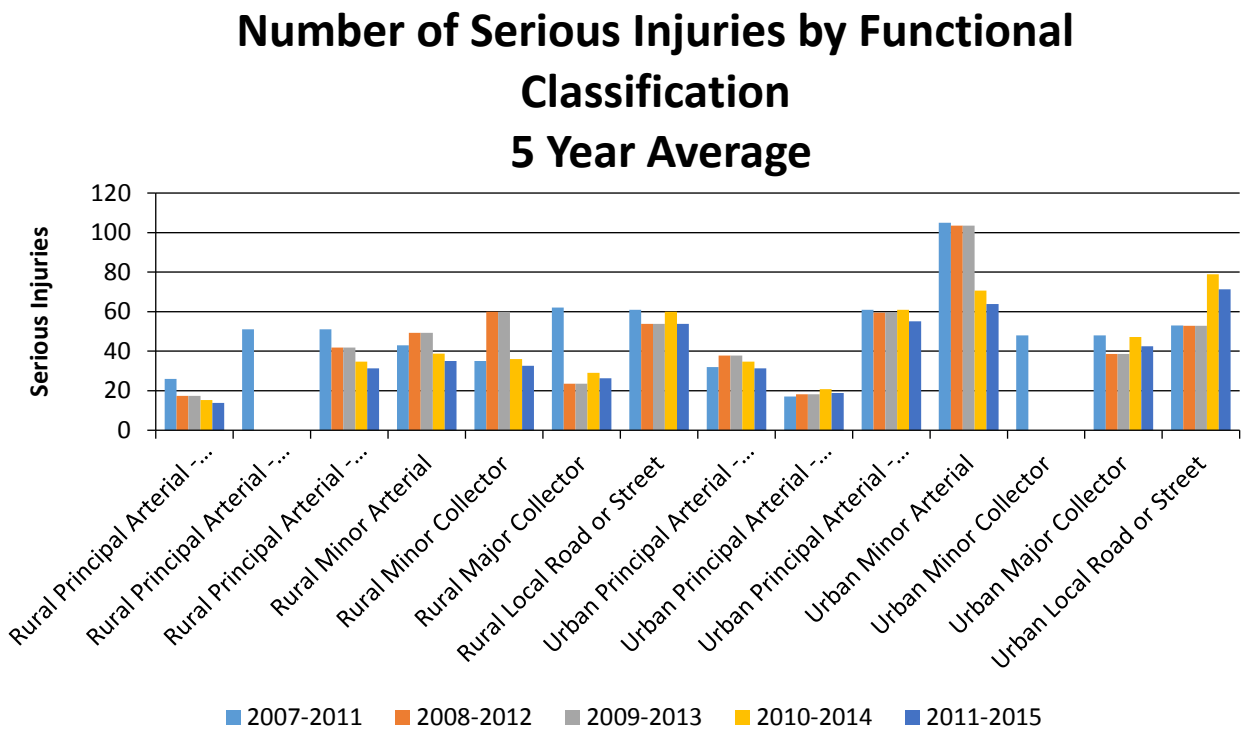
Year 2015

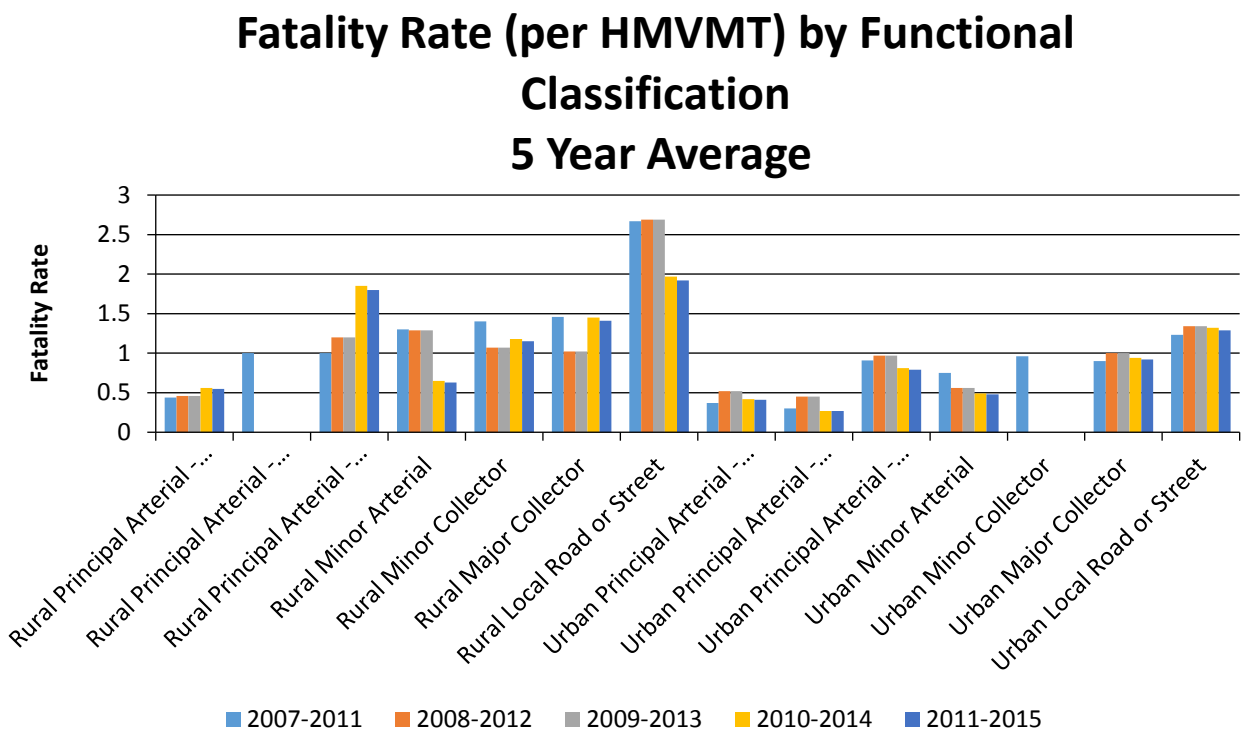
Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Rural Principal Arterial - Interstate	5.71	13.77	0.55	1.33
Rural Principal Arterial - Other Freeways and Expressways	0	0	0	0
Rural Principal Arterial - Other	18.26	31.28	1.8	3.08
Rural Minor Arterial	6.85	35.04	0.63	3.23
Rural Minor Collector	11.41	32.54	1.15	3.28
Rural Major Collector	6.85	26.28	1.41	5.42
Rural Local Road or Street	6.85	53.81	1.92	15.07
Urban Principal Arterial - Interstate	7.99	31.28	0.41	1.61
Urban Principal Arterial - Other Freeways and Expressways	3.42	18.77	0.27	1.46
Urban Principal Arterial - Other	10.27	55.06	0.79	4.22
Urban Minor Arterial	7.99	63.82	0.48	3.81
Urban Minor Collector	0	0	0	0
Urban Major Collector	7.99	42.55	0.92	4.88
Urban Local Road or Street	11.41	71.33	1.29	8.04

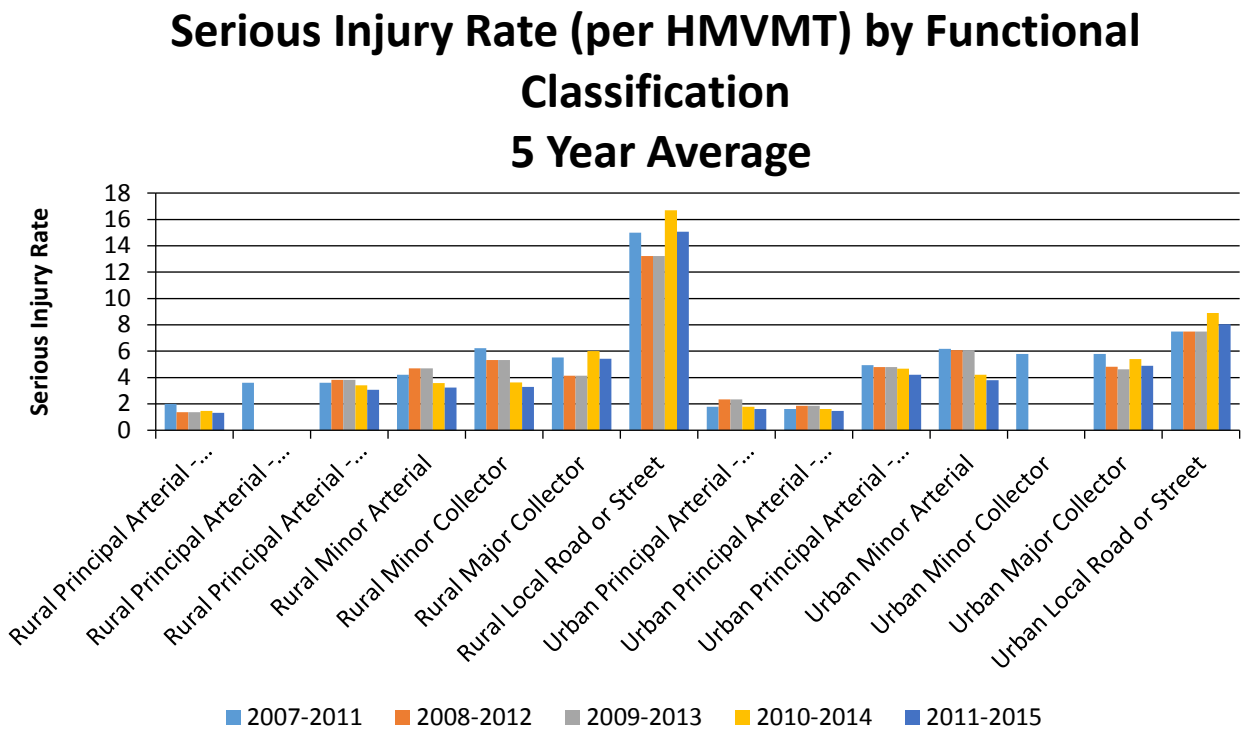
Year 2015

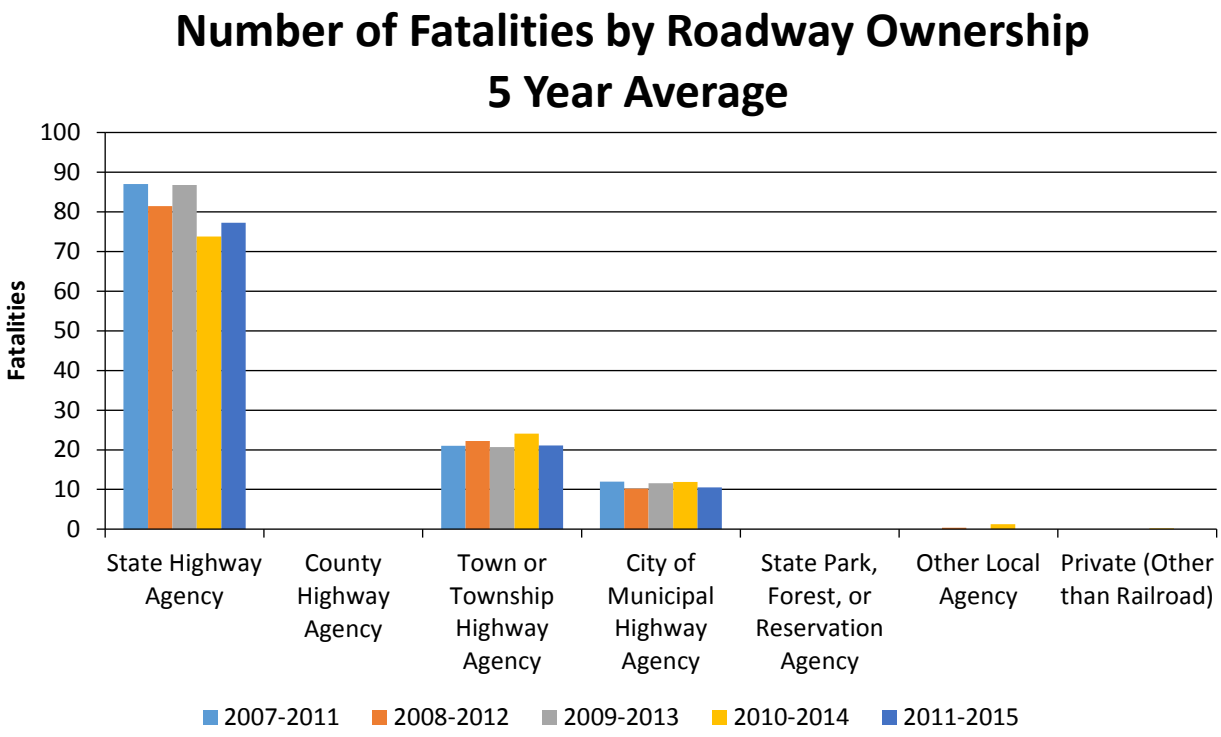
Roadways	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
State Highway Agency	77.23	293.9	0.78	2.98
County Highway Agency	0	0	0	0
Town or Township Highway Agency	21.13	102.83	2.55	12.43
City of Municipal Highway Agency	10.52	97.31	0.86	7.96
State Park, Forest, or Reservation Agency	0	0	0	0
Local Park, Forest or Reservation Agency	0	0	0	0
Other State Agency	0	0	0	0
Other Local Agency	0	0	0	0
Private (Other than Railroad)	0	0.39	0	0
Railroad	0	0	0	0
State Toll Authority	0	0	0	0
Local Toll Authority	0	0	0	0
Other Public Instrumentality (e.g. Airport, School, University)	0	0	0	0
Indian Tribe Nation	0	0	0	0

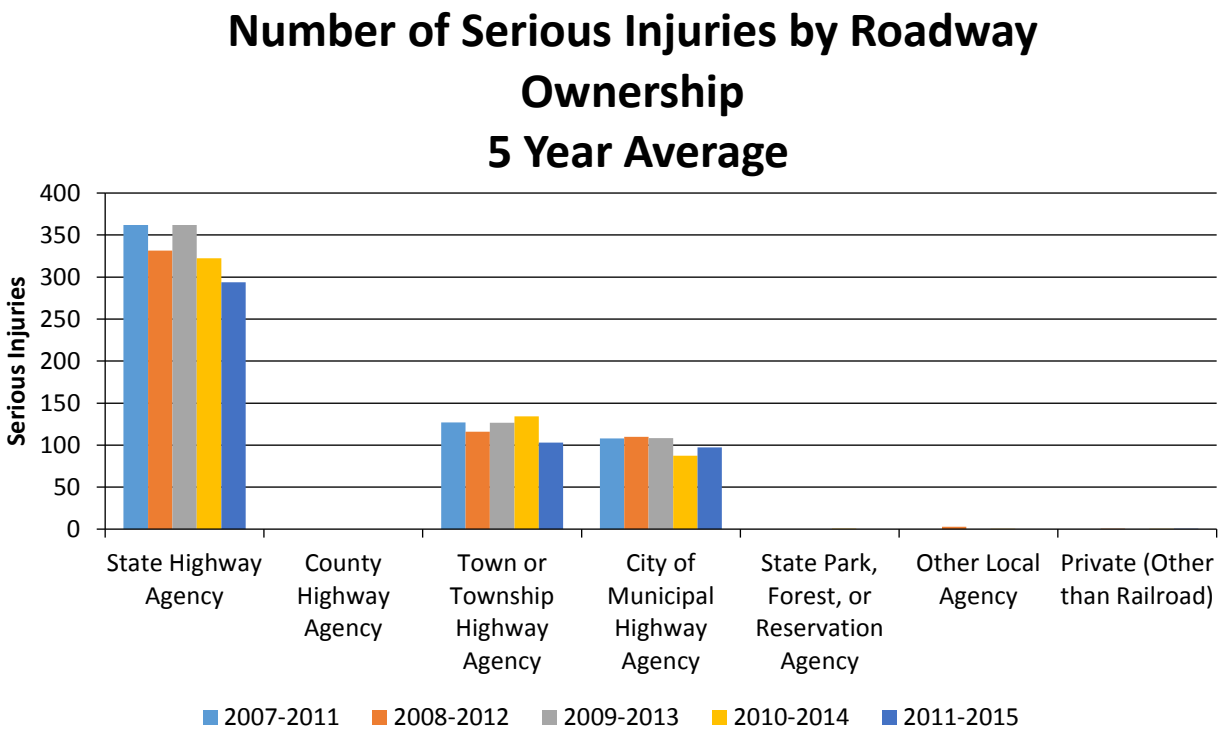

Number of Fatalities by Functional Classification
5 Year Average
Fatalities
20
18
16
14
12
10
8
6
4
2
0
Rural Principal Arterial -...
Rural Principal Arterial -...
Rural Principal Arterial - Other
Rural Minor Arterial
Rural Minor Collector
Rural Major Collector
Rural Local Road or Street
Urban Principal Arterial -...
Urban Principal Arterial -...
Urban Principal Arterial - Other
Urban Minor Arterial
Urban Minor Collector
Urban Major Collector
Urban Local Road or Street
2007-2011
2008-2012
2009-2013
2010-2014
2011-2015

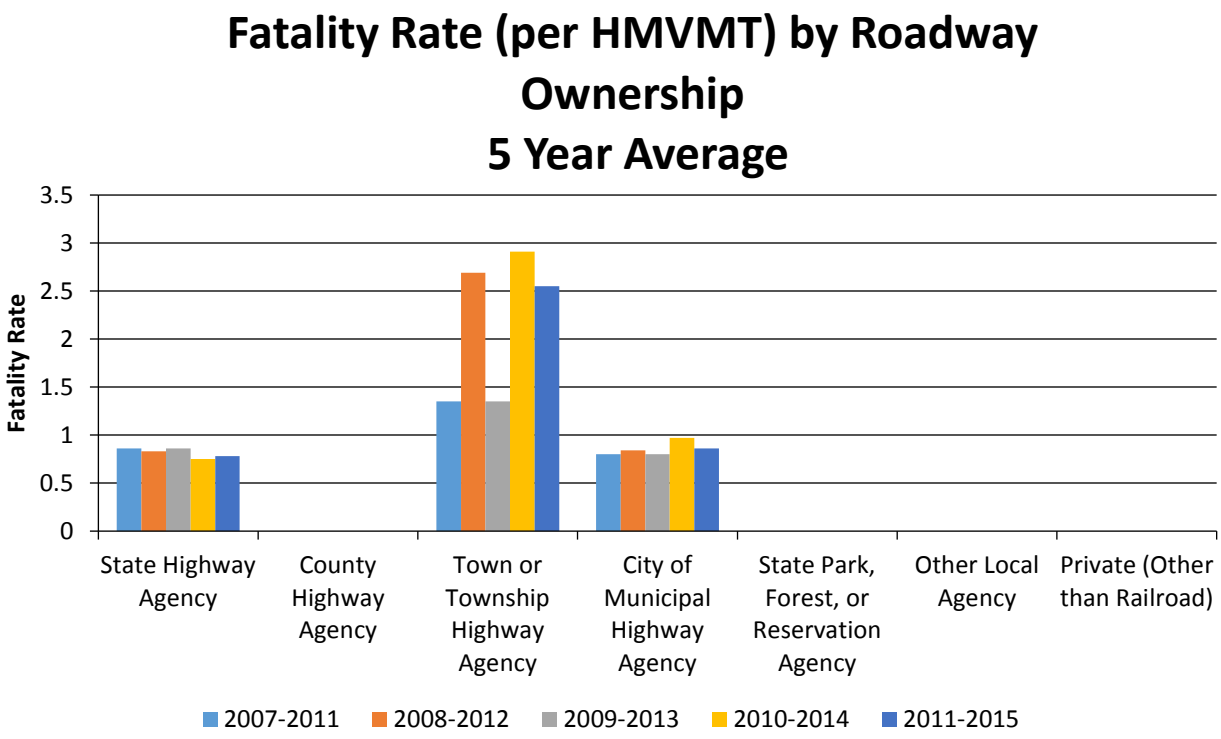

Number of Serious Injuries by Functional Classification
5 Year Average
Serious Injuries
120
100
80
60
40
20
0
Rural Principal Arterial -...
Rural Principal Arterial -...
Rural Principal Arterial -...
Rural Minor Arterial
Rural Minor Collector
Rural Major Collector
Rural Local Road or Street
Urban Principal Arterial -...
Urban Principal Arterial -...
Urban Principal Arterial -...
Urban Minor Arterial
Urban Minor Collector
Urban Major Collector
Urban Local Road or Street
2007-2011
2008-2012
2009-2013
2010-2014
2011-2015

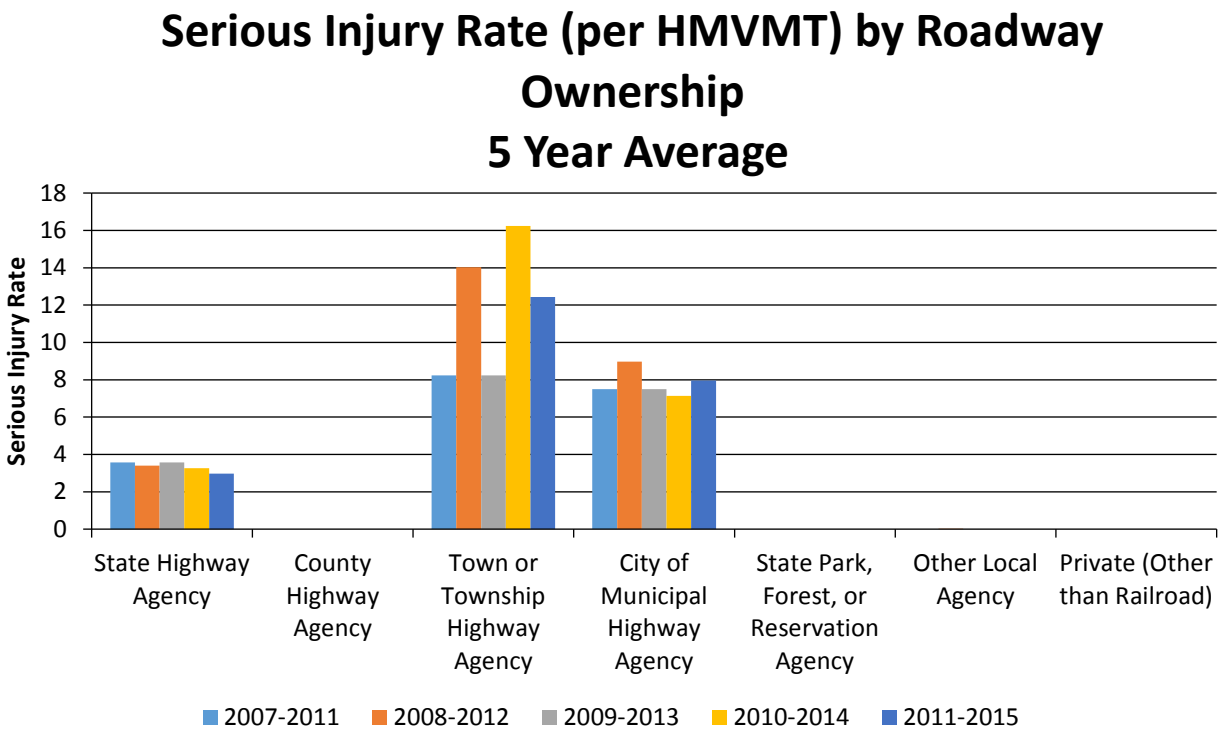

Fatality Rate (per HMVMT) by Functional Classification
5 Year Average
Fatality Rate
3
2.5
2
1.5
1
0.5
0
Rural Principal Arterial -...
Rural Principal Arterial -...
Rural Principal Arterial -...
Rural Minor Arterial
Rural Minor Collector
Rural Major Collector
Rural Local Road or Street
Urban Principal Arterial -...
Urban Principal Arterial -...
Urban Principal Arterial -...
Urban Minor Arterial
Urban Minor Collector
Urban Major Collector
Urban Local Road or Street
2007-2011
2008-2012
2009-2013
2010-2014
2011-2015


Serious Injury Rate (per HMVMT) by Functional Classification
5 Year Average
Serious Injury Rate
18
16
14
12
10
8
6
4
2
0
Rural Principal Arterial -...
Rural Principal Arterial -...
Rural Principal Arterial -...
Rural Minor Arterial
Rural Minor Collector
Rural Major Collector
Rural Local Road or Street
Urban Principal Arterial -...
Urban Principal Arterial -...
Urban Principal Arterial -...
Urban Minor Arterial
Urban Minor Collector
Urban Major Collector
Urban Local Road or Street
2007-2011
2008-2012
2009-2013
2010-2014
2011-2015


Number of Fatalities by Roadway Ownership
5 Year Average
Fatalities
100
90
80
70
60
50
40
30
20
10
0
State Highway Agency
County Highway Agency
Town or Township Highway Agency
City of Municipal Highway Agency
State Park, Forest, or Reservation Agency
Other Local Agency
Private (Other than Railroad)
2007-2011
2008-2012
2009-2013
2010-2014
2011-2015


Number of Serious Injuries by Roadway Ownership
5 Year Average
Serious Injuries
400
350
300
250
200
150
100
50
0
State Highway Agency
County Highway Agency
Town or Township Highway Agency
City of Municipal Highway Agency
State Park, Forest, or Reservation Agency
Other Local Agency
Private (Other than Railroad)
2007-2011
2008-2012
2009-2013
2010-2014
2011-2015


Fatality Rate (per HMVMT) by Roadway Ownership
5 Year Average
Fatality Rate
3.5
3
2.5
2
1.5
1
0.5
0
State Highway Agency
County Highway Agency
Town or Township Highway Agency
City of Municipal Highway Agency
State Park, Forest, or Reservation Agency
Other Local Agency
Private (Other than Railroad)
2007-2011
2008-2012
2009-2013
2010-2014
2011-2015



Enter additional comments here to clarify your response for this question or add supporting information.

Are there any other aspects of the general highway safety trends on which the State would like to elaborate?

Yes

Provide additional discussion related to general highway safety trends.

Safety Performance Targets

Safety Performance Targets

Calendar Year 2018 Targets *

Number of Fatalities	113.2

Describe the basis for established target, including how it supports SHSP goals.

The recommended target for fatalities is an increase of 2.2% per year for an estimated 5 year average to 113.2 by December 31, 2018 based on the data history. Trend Analysis should be used to determine data driven targets for measures dealing with Fatalities. Trend analysis produces intuitive results that are not politically sensitive for measures dealing with fatalities. NHDOT realizes there has been an increase in fatalities over the last several years. The graph shown in section 33 shows the results of the trend analysis and the trend lines use the most recent 5 year fatality averages to project the trend lines out to 2018. Although the target set is based on the data, NHDOT's efforts thru the SHSP is to reduce fatalities on NH roadways and will continue to advertise construction projects that will improve the safety on NH roadways to reduce fatalities.

Number of Serious Injuries 499.8

Describe the basis for established target, including how it supports SHSP goals.

The recommended target for serious injuries is to maintain or slightly increase the serious injury 5 year average to 499.8 by December 31, 2018 based on the data history. We anticipate a 1.5% annual increase in serious injuries. Goals of maintaining current performance should be used for targets dealing with serious injuries. NHDOT realizes there has been an increase in serious injuries over the last several years. The graph shown in section 33 shows the results of the 5 year average. Although the target set is based on the data, NHDOT's efforts thru the SHSP is to reduce serious injuries on NH roadways and will continue to advertise construction projects that will improve the safety on NH roadways to reduce serious injuries.

Fatality Rate 0.866

Describe the basis for established target, including how it supports SHSP goals.

The recommended target for fatality rate is to maintain or increase slightly the 5 year average fatality rate to 0.866 by December 31, 2018 based on the data. We anticipate a 0.014 percent annual increase in the fatality rate. Trend Analysis should be used to determine data driven targets for measures dealing with Fatalities. Trend analysis produces intuitive results that are not politically sensitive for measures dealing with fatalities. NHDOT realizes there has been an increase in fatalities over the last several years. The graph shown in section 33 shows the results of the trend analysis and the trend lines use the most recent 5 year fatality rate averages to project the trend lines out to 2018. Although the target set is based on the data, NHDOT's efforts thru the SHSP is to reduce fatalities on NH roadways and will continue to advertise construction projects that will improve the safety on NH roadways to reduce the fatality rate.

Serious Injury Rate 3.847

Describe the basis for established target, including how it supports SHSP goals.

The recommended target for serious injury rate is to maintain the existing performance of the existing 5 year average serious injury rate to 3.847 by December 31, 2018 based

on the data history. Goals of maintaining current performance should be used for targets dealing with serious injury rate. NHDOT realizes there has been an increase in serious injury rate over the last several years. The graph shown in section 33 shows the results of the 5 year average. Although the target set is based on the data, NHDOT's efforts thru the SHSP is to reduce serious injury rate on NH roadways and will continue to advertise construction projects that will improve the safety on NH roadways to reduce the serious injury rate.

Total Number of Non-Motorized Fatalities and Serious Injuries	51.4

Describe the basis for established target, including how it supports SHSP goals.

The recommended target for the total number of non-motorized fatalities and serious injuries is to maintain the existing performance for an estimates 5 year average to 51.4 by December 31, 2018 based on data. Trend analysis produces challenging results which are heavily weighed by serious injuries. Confidence in the results is further diminished by the source of information, which is inconsistent and it is a goal in NH to improve reporting for future years. Goals of maintaining current performance should be used for targets dealing with serious injuries. The goal is data driven. Trend analysis may be an option for analyzing measures dealing with serious injury data in the future as the system that produces the data is undergoing significant revision (Access Database to VISION). However, alternatives to trend analysis may be in use by that time. Although the target set is based on the data, NHDOT's efforts thru the SHSP is to reduce fatalities and serious injuries on NH roadways and will continue to advertise construction projects that will improve the safety on NH roadways to reduce the crashes of all types.

Enter additional comments here to clarify your response for this question or add supporting information.

Introduction: The data that will be used to determine significant progress (whether or not targets are achieved) is prescribed by regulations. The methodology to determine targets are not. Data is collected from the National Highway Traffic Safety Administration (NHTSA), the Highway Performance Monitoring System (HPMS) and the New Hampshire Department of Safety (DOS).

Trend analysis was used to analyze the data. Trend analysis uses past data and patterns to project future outputs. Trend analysis functions correctly when no significant change has occurred in the underlying processes that affect the overall metric. Safety gains are driven by policy and budget and because there has been no recent significant change to policy or budget trend analysis is appropriate.

Sources Data is collected from several sources. Yearly values are collected from each source and when enough data is available, 5 year averages are created. 5-year averages are valuable for safety analysis because the 5 year period generally reduces variability that significantly affects values from year to year and because regulators will use 5-year averages to determine significant progress. To calculate 5 individual 5-year averages data would need to be available from 2007.

Data sources are prescribed by the regulations: Fatalities: NHTSA, Rate of Fatalities (10^8 VMT): NHTSA & HPMS, Serious Injuries: DOS, Rate of Serious Injuries (10^8 VMT): DOS & HPMS, Non Motorized Fatalities & Serious Injuries: NHTSA & DOS

Describe efforts to coordinate with other stakeholders (e.g. MPOs, SHSO) to establish safety performance targets.

A Statewide safety target setting workshop was held in January 2017 to discuss the safety data in NH, who should be on the Target setting task force, develop a timeline and to ensure every participant understands the safety target process and methods. At the workshop 46 participants from FHWA, NHTSA, NHDOT, NH Office of Highway Safety, Regional planning staff and Metropolitan Planning Organizations were invited.

The safety target task force met monthly or bimonthly from January to June to develop the 5 safety targets for NH. Those members of the task force include NHDOT, NH Office of Highway Safety, and the representative for the Metropolitan Planning Organizations. The results of this task force produced the safety target setting recommendations and justifications with graphs.

Does the State want to report additional optional targets?

No

Enter additional comments here to clarify your response for this question or add supporting information.

Applicability of Special Rules

Does the HRRR special rule apply to the State for this reporting period?

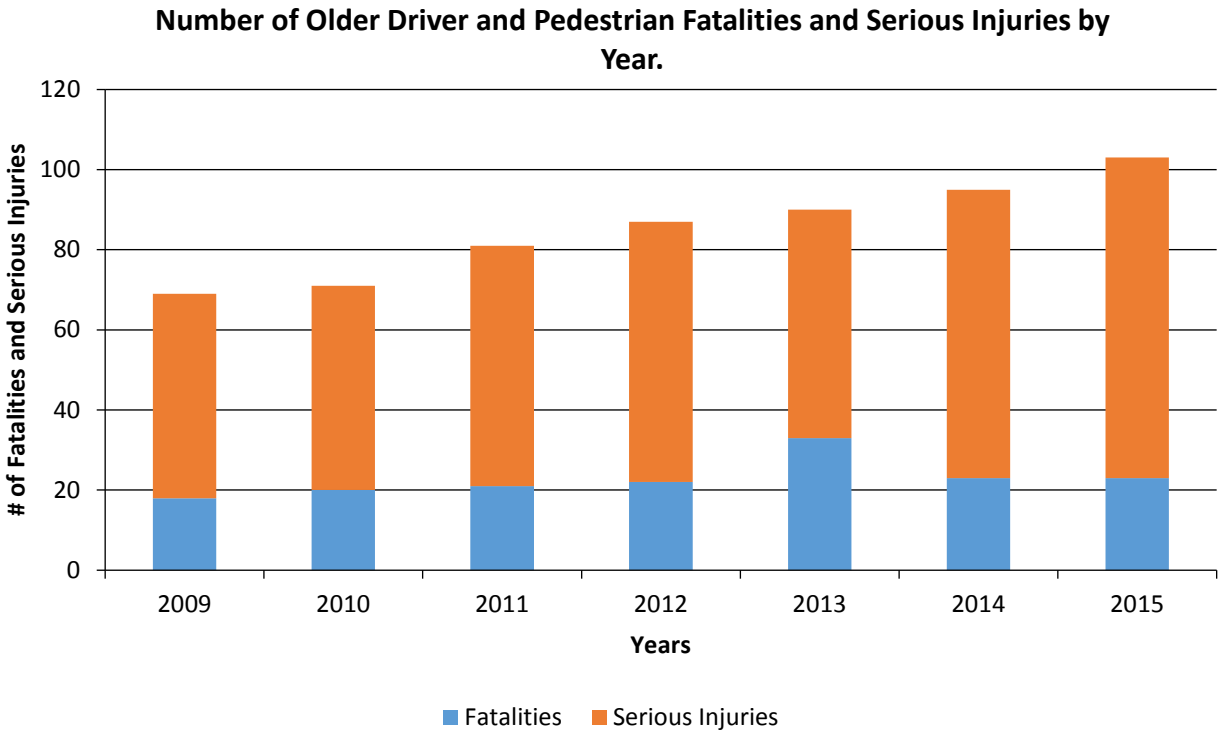
Yes

Enter additional comments here to clarify your response for this question or add supporting information.

In FY2017, NHDOT no longer meets the HRRR Special Rule. The HRRR money spend this year is not new funds for NH in FY 2017. Thru final voucher process HRRR monies were de-obligated and the balance will be used in FY 2017 in the project District Three #24863.

Provide the number of older driver and pedestrian fatalities and serious injuries for the past seven years.

PERFORMANCE MEASURES	2009	2010	2011	2012	2013	2014	2015
Number of Older Driver and Pedestrian Fatalities	18	20	21	22	33	23	23
Number of Older Driver and Pedestrian Serious Injuries	51	51	60	65	57	72	80



Enter additional comments here to clarify your response for this question or add supporting information.

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

Change in fatalities and serious injuries
Benefit/Cost Ratio

Enter additional comments here to clarify your response for this question or add supporting information.

For each HSIP project the Benefit to cost ratio is calculated at the scoping stage to check that the ratio is larger than one but preferable larger than 2.

Based on the measures of effectiveness selected previously, describe the results of the State's program level evaluations.

NHDOT's HSIP program is data driven using crash data and the benefit to cost ratios. This creates a program that relies heavily on data and improves locations bases on the severity of crashes and cost effective improvements. The program's goal is to reduce fatal and serious injuries on NH roadways by improving safety with the proposed improvements.

NHDOT's HSIP program consists of systemic projects. These projects improve safety statewide and include the following type of projects: median guardrail, horizontal curve warning sign upgrades, replacing back plates on traffic signal heads with retro-reflective tape around the traffic signal heads, installing rumble strips centerline and edge line, upgrading cable guardrail to beam guardrail, and replacing guardrail terminal end units to current standards.

NHDOT feels these programs have reduced fatalities and serious injuries on NH roadways.

What other indicators of success does the State use to demonstrate effectiveness and success of the Highway Safety Improvement Program?

More systemic programs
RSAs completed
Increased awareness of safety and data-driven process
HSIP Obligations

Enter additional comments here to clarify your response for this question or add supporting information.

The success of NH's HSIP program is dependent on road safety audit completion with projects that can actually move from an audit to an HSIP project. The Road safety audits now are a data driven selection method requiring crash data to include a fatal or serious injury. This requirement targets intersection or locations that has a safety issue that needs to be addressed, which makes NH roadways safer. NH obligates and advertises HSIP projects and is moving the program to a systemic approach. The crash data is required for all HSIP projects and a benefit to cost ratio is calculated to allow the project into the HSIP program. If the b/c ratio is greater than one then the project is eligible for HSIP funds.

Are there any significant programmatic changes that have occurred since the last reporting period?

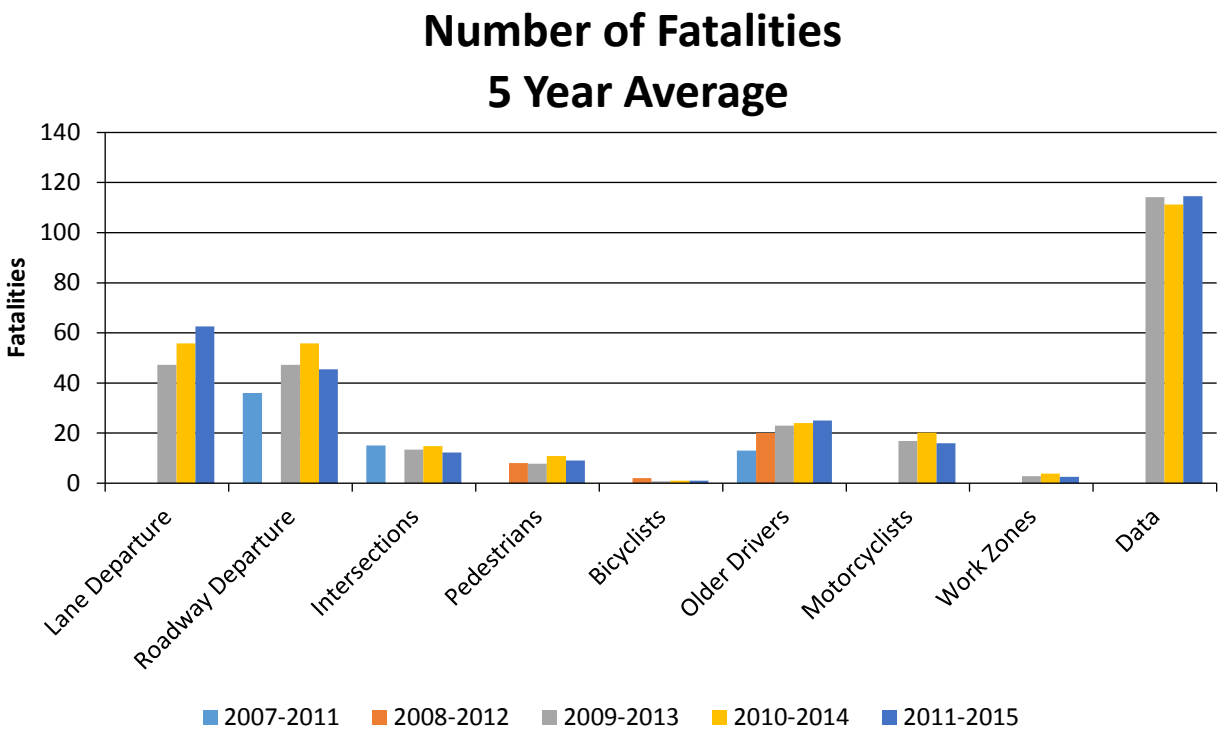
No

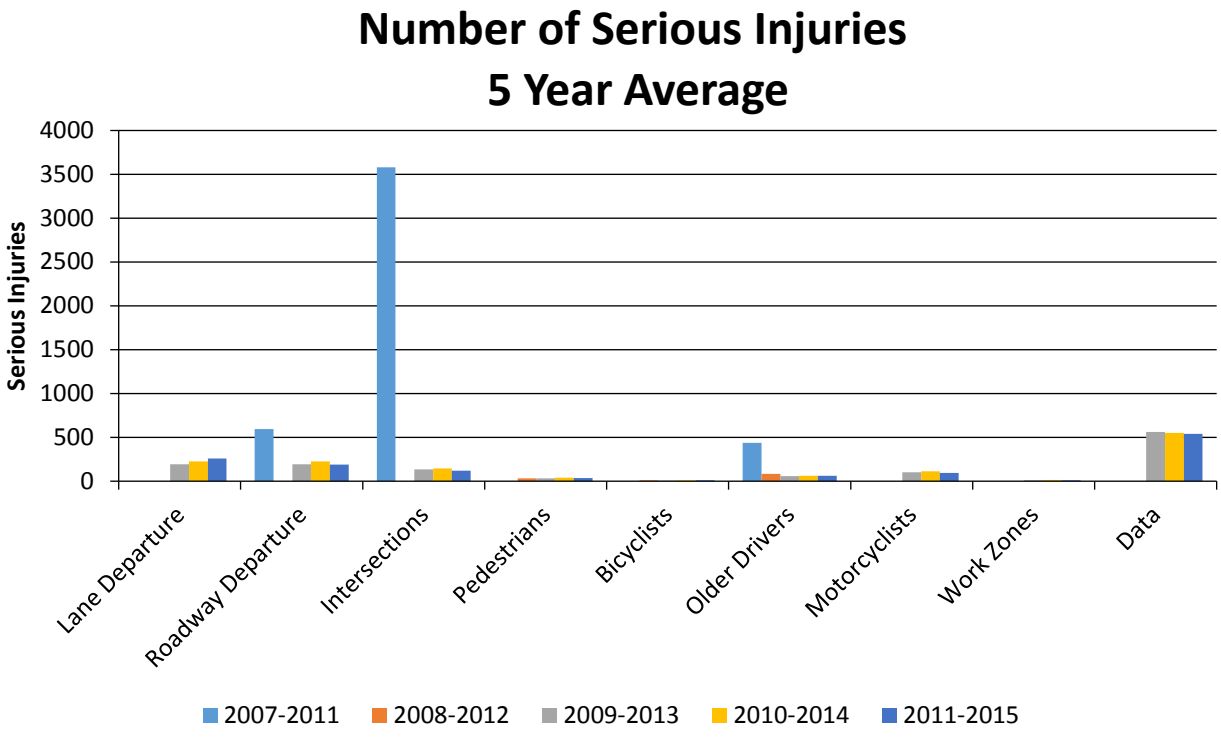
Effectiveness of Groupings or Similar Types of Improvements

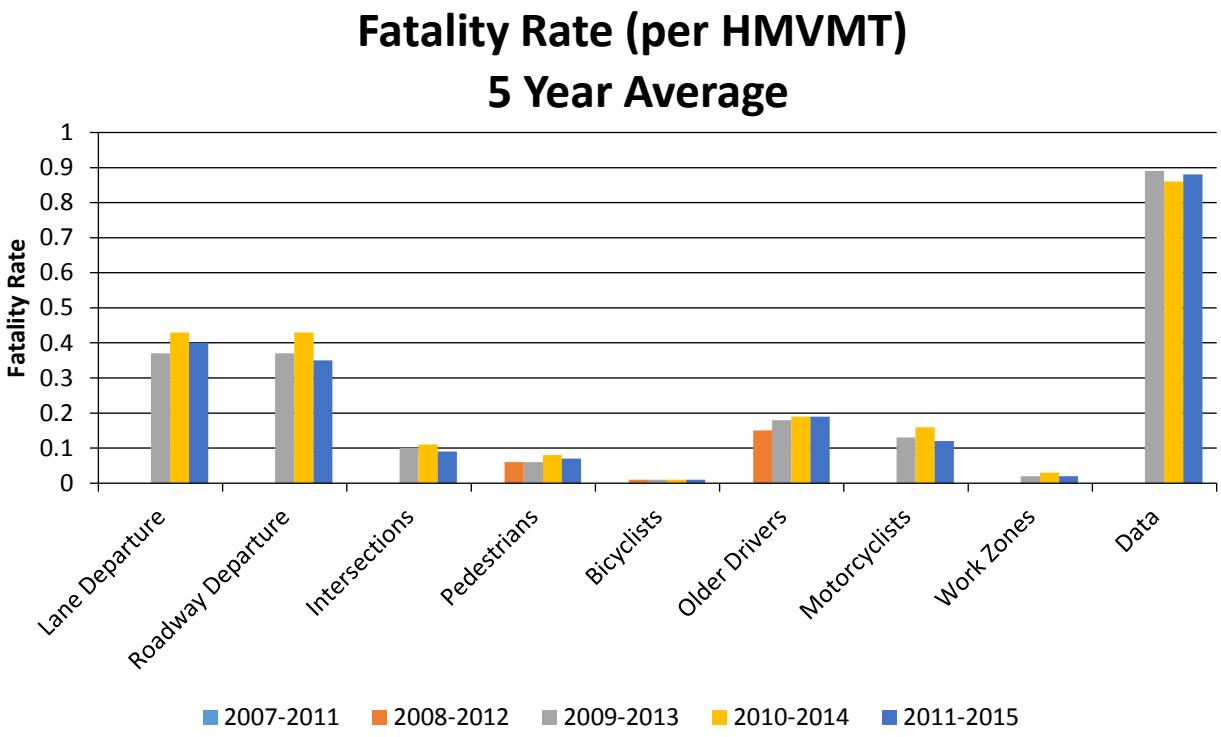
Present and describe trends in SHSP emphasis area performance measures.

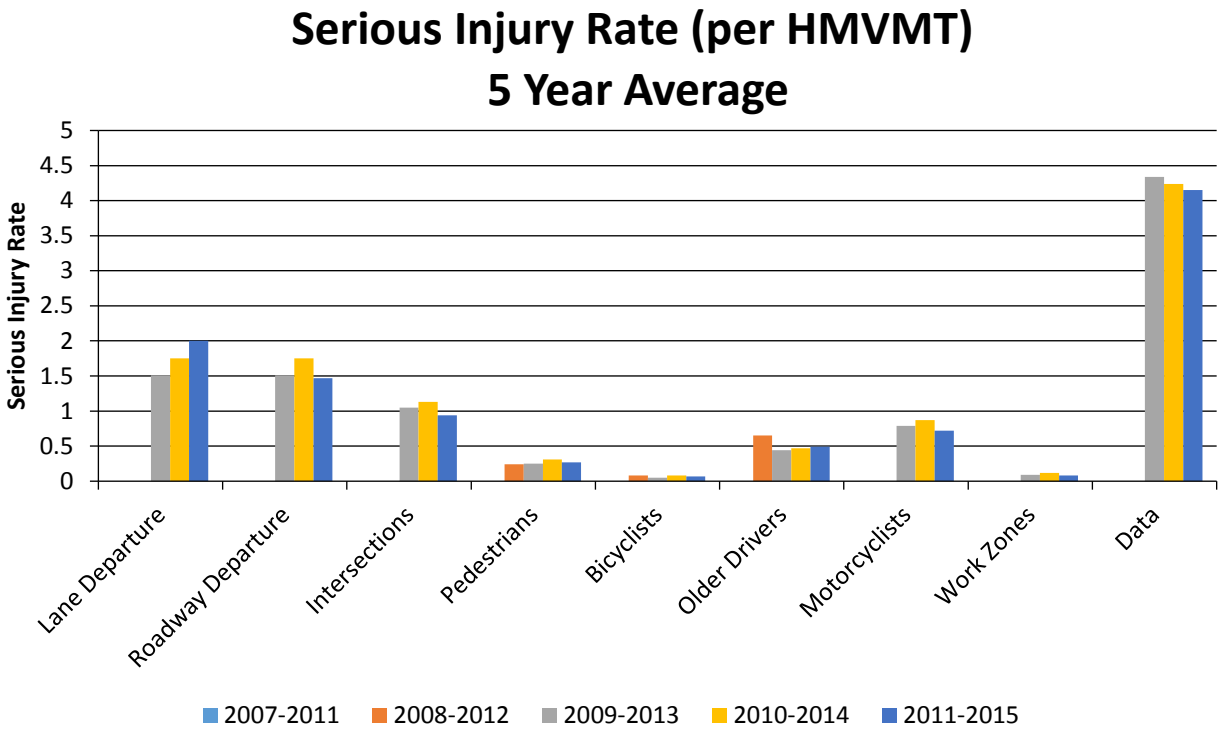
Year 2015

SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)	Other 1	Other 2	Other 3
Lane Departure	Run-off-road	62.6	259	0.4	2	0	0	0
Roadway Departure	Run-off-road	45.4	190.4	0.35	1.47	0	0	0
Intersections	Intersections	12.2	121.4	0.09	0.94	0	0	0
Pedestrians	Vehicle/pedestrian	9	35.2	0.07	0.27	0	0	0
Bicyclists	Vehicle/bicycle	1	9.2	0.01	0.07	0	0	0
Older Drivers	All	25	63	0.19	0.49	0	0	0
Motorcyclists	All	16	93.2	0.12	0.72	0	0	0
Work Zones	All	2.6	10	0.02	0.08	0	0	0
Data	All	114.6	538	0.88	4.15	0	0	0


Number of Fatalities
5 Year Average
Fatalities
140
120
100
80
60
40
20
0
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
Data
2007-2011
2008-2012
2009-2013
2010-2014
2011-2015


Number of Serious Injuries
5 Year Average
Serious Injuries
4000
3500
3000
2500
2000
1500
1000
500
0
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
Data
2007-2011
2008-2012
2009-2013
2010-2014
2011-2015





Enter additional comments here to clarify your response for this question or add supporting information.

Has the State completed any countermeasure effectiveness evaluations during the reporting period?

2017 New Hampshire Highway Safety Improvement Program

No

Enter additional comments here to clarify your response for this question or add supporting information.
NH has not conducted any countermeasure evaluations

Project Effectiveness

Provide the following information for previously implemented projects that the State evaluated this reporting period.

LOCATION	FUNCTIONAL CLASS	IMPROVEMENT CATEGORY	IMPROVEMENT TYPE	PDO BEFORE	PDO AFTER	FATALITY BEFORE	FATALITY AFTER	SERIOUS INJURY BEFORE	SERIOUS INJURY AFTER	ALL INJURY BEFORE	ALL INJURY AFTER	TOTAL BEFORE	TOTAL AFTER	EVALUATION RESULTS (BENEFIT/COST RATIO)
Whitefield #p2953	Rural Principal Arterial - Other	Roadway	Roadway - other	29.00	13.00	1.00		2.00		4.00	3.00	36.00	16.00	1.48
statewide #15358	Rural Principal Arterial - Other	Roadway	Rumble strips - center			4.00						4.00		
Derry #13249	Urban Principal Arterial - Other	Intersection traffic control	Modify traffic signal - modernization/replacement	62.00	114.00		1.00		4.00	12.00	35.00	74.00	154.00	0.78
New London #14451A	Rural Principal Arterial - Other	Roadway	Roadway narrowing (road diet, roadway reconfiguration)	23.00	56.00	1.00		3.00		6.00	2.00	33.00	58.00	19.05
Boscowan #13957A	Rural Principal Arterial - Other	Intersection geometry	Intersection geometry - other	2.00	2.00			2.00		4.00		8.00	2.00	0.32
Holderness #15309	Rural Principal Arterial - Other	Intersection geometry	Intersection geometrics - modify skew angle	7.00						1.00		8.00		3.61
Epsom #15623	Rural Principal Arterial - Other	Intersection traffic control	Intersection signing - add basic advance warning	11.00	14.00	1.00				2.00	4.00	14.00	18.00	81.72
Pittsfield #15622	Rural Principal Arterial - Other	Intersection traffic control	Modify traffic signal - modernization/replacement	13.00	2.00					7.00	1.00	20.00	3.00	1.65
brentwood #15619	Rural Principal Arterial - Other	Intersection traffic control	Modify traffic signal - modernization/replacement	9.00	12.00	1.00		1.00		14.00	4.00	25.00	16.00	36.86
Greenland #15618	Urban Principal Arterial - Other	Intersection geometry	Auxiliary lanes - add right-turn lane	26.00	20.00				1.00	7.00	11.00	33.00	32.00	3.02
Boscowan	Rural Principal Arterial - Other	Intersection traffic control	Modify control - modifications to roundabout	14.00	16.00					6.00	1.00	20.00	17.00	-0.55
Hampstead-Atkinson #15663	Urban Minor Collector	Intersection geometry	Auxiliary lanes - add right-turn lane	15.00	11.00	1.00				3.00	8.00	19.00	19.00	6.78
Lyme #15695	Rural Minor Collector	Speed management	Traffic calming feature	2.00	1.00					1.00		3.00	1.00	1.39
Effingham #16041	Rural Principal Arterial - Other	Intersection traffic control	Intersection signing - add enhanced advance warning (double-up and/or oversize)	6.00	1.00	3.00				2.00		11.00	1.00	532.64
Epping #15693	Rural Principal Arterial - Other	Intersection geometry	Through lanes - add additional through lane	56.00	49.00			1.00	1.00	18.00	9.00	75.00	59.00	1.16
East Kingston	Rural Minor Collector	Roadway signs and traffic control	Roadway signs and traffic control - other	3.00	6.00	1.00		1.00		7.00	1.00	12.00	7.00	385.19
Keene #20812	Urban Principal Arterial - Other	Intersection traffic control	Modify control - two-way stop to roundabout	12.00	1.00			1.00		1.00	3.00	14.00	4.00	0.93

2017 New Hampshire Highway Safety Improvement Program

LOCATION	FUNCTIONAL CLASS	IMPROVEMENT CATEGORY	IMPROVEMENT TYPE	PDO BEFORE	PDO AFTER	FATALITY BEFORE	FATALITY AFTER	SERIOUS INJURY BEFORE	SERIOUS INJURY AFTER	ALL INJURY BEFORE	ALL INJURY AFTER	TOTAL BEFORE	TOTAL AFTER	EVALUATION RESULTS (BENEFIT/COST RATIO)
Swanzey #15697A	Rural Minor Arterial	Roadside	Removal of roadside objects (trees, poles, etc.)	9.00	3.00					9.00	4.00	18.00	7.00	375.83
Concord #16204	Rural Principal Arterial - Other	Roadway	Roadway widening - add lane(s) along segment	18.00						4.00		22.00		33.71
Barrington #16201	Rural Principal Arterial - Other	Intersection geometry	Auxiliary lanes - add left-turn lane	12.00	4.00			1.00		6.00	2.00	19.00	6.00	0.90
Barnstead #16200	Rural Principal Arterial - Other	Intersection geometry	Auxiliary lanes - add left-turn lane	17.00	1.00			2.00		4.00	1.00	23.00	2.00	1.58
Candia #16412	Rural Minor Collector	Intersection geometry	Intersection geometrics - re-assign existing lane use	3.00	12.00			1.00		3.00	3.00	7.00	15.00	5.9

Enter additional comments here to clarify your response for this question or add supporting information.

Are there any other aspects of the overall HSIP effectiveness on which the State would like to elaborate?

No

Compliance Assessment

What date was the State's current SHSP approved by the Governor or designated State representative?

07/19/2017

What are the years being covered by the current SHSP?

From: 2017 To: 2021

When does the State anticipate completing it's next SHSP update?

2021

Enter additional comments here to clarify your response for this question or add supporting information.

Provide the current status (percent complete) of MIRE fundamental data elements collection efforts using the table below.

	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
MIRE NAME (MIRE NO.)	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
ROADWAY SEGMENT										
Segment Identifier (12)	100	100					100	100	100	100
Route Number (8)	100	100								
Route/Street Name (9)	100	100								
Federal Aid/Route Type (21)	100	100								
Rural/Urban Designation (20)	100	100					100	100		
Surface Type (23)	100	100					100	100		
Begin Point Segment Descriptor (10)	100	100					100	100	100	100
End Point Segment Descriptor (11)	100	100					100	100	100	100
Segment Length (13)	100	100								
Direction of Inventory (18)	100	100								
Functional Class (19)	100	100					100	100	100	100
Median Type (54)	0	0								

MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
Access Control (22)	100	100								
One/Two Way Operations (91)	100	100								
Number of Through Lanes (31)	100	100					100	100		
Average Annual Daily Traffic (79)	100	100					100	100		
AADT Year (80)	100	100								
Type of Governmental Ownership (4)	100	100					100	100	100	100
INTERSECTION										
Unique Junction Identifier (120)			100	100						
Location Identifier for Road 1 Crossing Point (122)			100	100						
Location Identifier for Road 2 Crossing Point (123)			100	100						
Intersection/Junction Geometry (126)			100	100						
Intersection/Junction Traffic Control (131)			0	0						
AADT for Each Intersecting Road (79)			100	100						
AADT Year (80)			100	100						
Unique Approach Identifier (139)			100	100						
INTERCHANGE/RAMP										
Unique Interchange Identifier (178)					0	0				
Location Identifier for Roadway at Beginning of Ramp Terminal (197)					100	100				
Location Identifier for Roadway at Ending Ramp Terminal (201)					100	100				
Ramp Length (187)					100	100				
Roadway Type at Beginning of Ramp Terminal (195)					100	100				

MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
Roadway Type at End Ramp Terminal (199)					100	100				
Interchange Type (182)					0	0				
Ramp AADT (191)					100	100				
Year of Ramp AADT (192)					100	100				
Functional Class (19)					100	100				
Type of Governmental Ownership (4)					100	100				
Totals (Average Percent Complete):	**94.44**	**94.44**	**87.50**	**87.50**	**81.82**	**81.82**	**100.00**	**100.00**	**100.00**	**100.00**

Enter additional comments here to clarify your response for this question or add supporting information.

NHDOT has collected all but four of the FDE's. Those elements are median type, intersection/junction traffic control, Unique interchange identifier and interchange type. All FDE's will be collected on roads with Functional System 1 through 7.

Describe actions the State will take moving forward to meet the requirement to have complete access to the MIRE fundamental data elements on all public roads by September 30, 2026.

NHDOT has collected all but four of the FDE's. Those elements are median type, intersection/junction traffic control, Unique interchange identifier and interchange type. All FDE's will be collected on roads with Functional System 1 through 7. The collection and management of the MIRE FDE's occurs within the NHDOT's Bureau of Planning and Community Assistance, GIS section and is stored in the roadway data inventory. We use an ArcGIS environment along with an Oracle database. This data is also shared on the NH Granite, which is NH's statewide GIS clearinghouse. Most elements are collected and updated on an annual basis by staff in the Planning and Community Assistance Bureau. Existing collection methodologies include collection by visiting sites and entering data into a laptop. Using aerial imagery and other forms of imagery to locate elements. Nightly scripts to help aggregate the data. We will be looking at more modern methods such as data collection with Ipads, Lidar and other technologies.

Median types, intersection/junction traffic control, unique interchange identifier and interchange type will be a medium term (4 to 6 years) collection.

For staff in the GIS section; two people at 100% of their time each. 2 people at 50% of their time each. For staff at the bureau of Traffic: two temporary staff (summer interns) at 100% each. There are no consultant efforts to gather data at this time. NHDOT will continue to maintain the MIRE data and fund the collection of the data leveraging existing GIS tools and their current operating budgets.

Provide the suspected serious injury identifier, definition and attributes used by the State for both the crash report form and the crash database using the table below. Please also indicate whether or not these elements are compliant with the MMUCC 4th edition criteria for data element P5. Injury Status, suspected serious injury.

CRITERIA	SUSPECTED SERIOUS INJURY IDENTIFIER(NAME)	MMUCC 4TH EDITION COMPLIANT *	SUSPECTED SERIOUS INJURY DEFINITION	MMUCC 4TH EDITION COMPLIANT *	SUSPECTED SERIOUS INJURY ATTRIBUTES(DESCRIPTORS)	MMUCC 4TH EDITION COMPLIANT *
Crash Report Form	A=incapacitating=serious injury	Yes	N/A	Yes	N/A	Yes
Crash Report Form Instruction Manual	suspected serious injury	Yes	It is estimated that Vision, the new electronic software, will have incorporated all towns/larger CRMS crash report by April 2019, which is the only way to be completely statewide MMUCC compatible.	Yes	The Department of Safety put together a data dictionary over a decade ago, but it will need to be updated with the current CRMS form.	Yes
Crash Database	suspected serious injury	No	N/A	No	N/A	No

CRITERIA	SUSPECTED SERIOUS INJURY IDENTIFIER(NAME)	MMUCC 4TH EDITION COMPLIANT *	SUSPECTED SERIOUS INJURY DEFINITION	MMUCC 4TH EDITION COMPLIANT *	SUSPECTED SERIOUS INJURY ATTRIBUTES(DESCRIPTORS)	MMUCC 4TH EDITION COMPLIANT *
Crash Database Data Dictionary	Incapacitating	No	Data dictionary needs to be updated as it is 10 years old.	No	It is estimated that Vision, the new electronic software, will have incorporated all towns/larger CRMS crash report by April 2019, which is the only way to be completely statewide MMUCC compatible.	No

Please describe the actions the State is taking to become compliant by April 15, 2019.

Enter additional comments here to clarify your response for this question or add supporting information.

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6.2 Model Minimum Uniform Crash Criteria (MMUCC) Compliance
New Hampshire's crash repository is currently designed according to MMUCC V3 guidelines.
New Hampshire will ensure adoption of the definition for "Suspected Serious Injury (A)" from the MMUCC 4th edition by April 15, 2019. These plans include the following:

- *Collecting and accurately aggregating MMUCC v4 attribute "Suspected Serious Injury (A)"*
- *The State's crash database, data dictionary, and crash report user manual employs the verbatim terminology and definitions for this attribute from the MMUCC v4 standard.*
- *The State's crash form employs the verbatim MMUCC v4 "Suspected Serious Injury (A)" attributes*
- *Ensure the seven serious injury types covered by the attribute are not included in the other attributes listed in the State's injury status data elements.*

(Note: The Department of Safety is updating the crash database to be MMUCC complaint using the Vision software and should be the new electronic reporting system statewide, VISION, by 2017.)

Did the State conduct an HSIP program assessment during the reporting period?
No

When does the State plan to complete it's next HSIP program assessment.

2018

Enter additional comments here to clarify your response for this question or add supporting information.

Optional Attachments

Program Structure:

New Hampshire HSIP Guidance2013.doc

Project Implementation:

Safety Performance:

Evaluation:

Compliance Assessment:

Glossary

5 year rolling average	means the average of five individuals, consecutive annual points of data (e.g. annual fatality rate).
Emphasis area	means a highway safety priority in a State's SHSP, identified through a data-driven, collaborative process.
Highway safety improvement project	means strategies, activities and projects on a public road that are consistent with a State strategic highway safety plan and corrects or improves a hazardous road location or feature or addresses a highway safety problem.
HMVMT	means hundred million vehicle miles traveled.
Non-infrastructure projects	are projects that do not result in construction. Examples of non-infrastructure projects include road safety audits, transportation safety planning activities, improvements in the collection and analysis of data, education and outreach, and enforcement activities.
Older driver special rule	applies if traffic fatalities and serious injuries per capita for drivers and pedestrians over the age of 65 in a State increases during the most recent 2-year period for which data are available, as defined in the Older Driver and Pedestrian Special Rule Interim Guidance dated February 13, 2013.
Performance measure	means indicators that enable decision-makers and other stakeholders to monitor changes in system condition and performance against established visions, goals, and objectives.
Programmed funds	mean those funds that have been programmed in the Statewide Transportation Improvement Program (STIP) to be expended on highway safety improvement projects.
Roadway Functional Classification	means the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide.
Strategic Highway Safety Plan (SHSP)	means a comprehensive, multi-disciplinary plan, based on safety data developed by a State Department of Transportation in accordance with 23 U.S.C. 148.
Systematic	refers to an approach where an agency deploys countermeasures at all locations across a system.
Systemic safety improvement	means an improvement that is widely implemented based on high risk roadway features that are correlated with specific severe crash types.
Transfer	means, in accordance with provisions of 23 U.S.C. 126, a State may transfer from an apportionment under section 104(b) not to exceed 50 percent of the amount apportioned for the fiscal year to any other apportionment of the State under that section.